



**Forestry
Skills
Action
Plan**



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Summary

In 2010 a group of key forestry players came together with the aim of increasing the number of new entrants to the sector and driving the skills of the current work force. The result of their work is this action plan, which tackles the sector's skills issues

The action plan identifies the key skills issues, as perceived by the group, and for each lists actions that would plug gaps. The members of the group who developed the action plan, as well the organisations they are members of, are making a public commitment to carrying out these activities. By doing so, they aim to start a movement across the sector to upskill the current, and train the future, forestry workforce.



In May 2010 Forestry Commission England convened a small cross-sector task and finish group to consider the skills issues faced by the forestry sector, focusing on operations within the forest gates

The group believes that, with the right workforce to underpin it, the forestry sector can and will:

- Increase woodland management
- Realise woodland creation aspirations
- Grow and create green jobs and businesses
- Add value to UK timber.

The group aimed to:

- Establish a consensus on the most urgent skills shortages and gaps in the current forestry workforce
- Identify what skills the sector needs to take advantage of the opportunities offered by a growing green economy
- Identify what barriers currently exist to equipping both today's and tomorrow's workforce with the right skills set
- Develop an action plan for tackling these barriers.

This action plan is the output of this group. The action plan does not aim to provide a complete picture of all the skills issues in forestry, nor does it profess to provide complete solutions to all barriers identified. Instead it hopes to tackle those barriers where concerted action can deliver the most significant, positive change in a relatively short space of time. This action plan aims to boost momentum in the forestry sector when it comes to tackling skills shortages.

The group hopes that from the actions outlined in this document will flow a more detailed picture of issues to be tackled and a roadmap for the forestry workforce. The group also hopes, after reporting on impact in three years, that other players will publicly sign up to actions on skills. In this sense, this action plan is just the beginning and will evolve and grow over time.

Forestry Commission England has co-ordinated and will continue to support this action plan but its implementation will be overseen by the England Forest Industries Partnership (EFIP). EFIP will also coordinate future sector action started by this action plan.



Introduction

The following core group of stakeholders¹ have signed up to this action plan and will deliver it



Confor
Trade association for forest and timber processing businesses.



England Forest Industries Partnership (EFIP)
A partnership of trade associations, businesses and public sector bodies in the forestry and timber processing sectors.



FOREST EDUCATION INITIATIVE

Forest Education Initiative (FEI)
A network of local groups that raise awareness among young people of the link between trees and wood products.



Forestry Commission England
The Government department responsible for protecting, expanding and promoting the sustainable management of woodlands and increasing their value to society and the environment.



Lantra
The Sector Skills Council for the land-based and environmental industries.



Midlands Wood Fuel
Wood fuel supply company in the West Midlands and North West.



National School of Forestry
Delivers higher and further forestry education.



Pryor & Rickett
Woodland management and forestry consultancy services.



Small Woods Association
Represents small woodland owners and the coppicing industry. Also delivers forestry apprenticeships.



UPM TILHILL

UPM Tilhill
Forestry and timber harvesting company.

¹ We would like to acknowledge the contribution of David Sulman at the UK Forest Products Association (UKFPA), who kindly gave constructive comments on the final draft of this action plan.



Measuring progress

For three years after formal agreement of stakeholders to deliver this action plan, ie by 14 June 2014, partners will be asked to report on their activities and corresponding impact on an annual basis

Furthermore, data on the number of new entrants and recruitment difficulties experienced by employers will also be used to determine progress.

Overview of the opportunities and risks for forestry and its workforce

Forestry is a green sector. Woods and forests are the lungs of world

Woodfuel from sustainably managed woods is carbon lean and renewable. Wood products such as furniture, timber beams and panel boards capture carbon and emit less carbon when produced compared to other materials such as concrete and plastic.

In fact, trees absorb one tonne of carbon dioxide for every cubic metre of growth. When it comes to timber products, between 0.7 and 1.1 tonnes of carbon dioxide is saved for every cubic metre of wood used instead of other building materials. ²

The forestry sector looks set to grow

Carbon and energy markets are growing and provide opportunities to increase woodland management and cover. Examples include Woodland Carbon Code³ initiatives, which allow for voluntary carbon offsetting through woodland creation in the UK. Carbon accounting is also likely to stimulate the use of timber products as a renewable, carbon-storing material. Finally, the recently introduced Renewable Heat Incentive is already stimulating woodfuel markets.

The Read Report⁴ highlighted the carbon benefits of woodland expansion, and the Government is now looking to increase tree cover through the Forestry Commission-led Woodland Carbon Task Force – charged with kick-starting a major increase in new woodland planting to help the UK curb and adapt to climate change. Moreover, the Government's Big Tree Plant funding scheme is encouraging and supporting communities to plant trees in their neighbourhoods. The scheme will give £4 million in grants during the campaign (2011 to 2015), with the aim of planting at least one million trees.

Lantra, the Sector Skills Council, estimates that there are currently just over 16,000 people employed in the tree and timber industries in England⁵. In view of woodland creation aspirations and expected wood product market trends, the number of jobs in the forestry sector could more than double. The woodfuel industry alone is expected to create an additional 15,000 jobs by 2020 and add £1.24 billion of GVA to the economy. ⁶

² Edinburgh Centre for Carbon Management, quoted in Wood Co₂s Less and Woodforgood.com – Wood and the low carbon economy: key facts. For further information on the carbon footprint of wood products please see www.woodforgood.com

³ For more information on the Woodland Carbon Code see www.forestry.gov.uk/carboncode

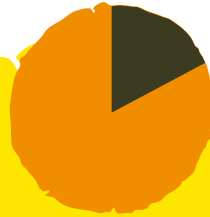
⁴ Sir David Read 2009. Combating Climate Change: A Role for UK Forests. Forestry Commission.

⁵ Lantra 2007. Sector Skills Agreement for Skills and Timber.

⁶ Preliminary figures from an economic forecasting study commissioned by Forestry Commission England, to be published shortly.

Skilled workers are urgently needed if the sector is to take advantage of green growth opportunities

Despite the positive outlook for forestry, businesses are having recruitment difficulties. Limited information is available on skills issues in forestry but existing data reveal a worrying picture:⁷



17%
of establishments report a vacancy



43%
of these vacancies are considered hard to fill, with the majority of these attributed to skills shortages



53%
of the workforce is over 40 years old, indicating worse skills shortages in future if the number of new entrants does not increase

“The (low) levels of training undertaken by those in the work place is surprising, if not of considerable concern.”⁹

Source: Lantra

The industry specifically reports problems recruiting young people, managers with practical/technical expertise and craft workers including tree climbers, planting teams and machine operators.⁷

Despite the demand for skilled forest workers, few qualified workers are entering the sector, as illustrated by the table below.

Number of people completing the Trees and Timber Apprenticeship in England

2003/4	2004/5	2005/6	2006/7	2007/8
5	3	4	13	16

Source: Lantra

The most pressing skills gaps, according to employers, are:

- customer relations (reported by 85% of employers)
- communication (85%)
- planning and organising (79%)
- technical/practical skills (74%)
- as well as literacy (74%)
- and numeracy (71%).⁸

⁷ Lantra 2009. Research fact sheet for trees and timber, labour market information www.lantra.co.uk/stakeholders/research-documents/skills-assessment/report

⁸ Lantra 2007. Sector Skills Agreement for Skills and Timber.

⁹ However, the data gathered by Lantra does not include industry-specific courses and may therefore somewhat underestimate the number of apprentices.

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The skills task and finish group identified eight major barriers to tackling skills issues in the forestry sector, as well as ways of overcoming them

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1. Lack of labour market information

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Top-level labour market information (as described earlier) clearly shows the need for action on skills. While the skills task and finish group believes that action needs to be taken now and we cannot afford to wait for the complete picture, it is clear that improved information could increase effectiveness of interventions.

More detailed information is needed on (a) the causes of skills shortages and gaps and, related to this (b) how the right forestry workforce can be developed to underpin a growing sector. Moreover, little information is available on potential labour pools. Improved understanding would help to attract new entrants and establish appropriate career paths.

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Actions

- Lantra will conduct research on potential labour pools. Suggestions from skills task and finish group members have included ex-army and ex-police staff as well as those looking for a different lifestyle.
- Using this information, as well as using other evidence, Lantra, with support from EFIP, will develop a forestry workforce plan. This will:
 - Outline the workforce needs of the forestry sector for the medium to long-term
 - Identify the capacity of the sector to train, looking at apprenticeships in particular
 - Identify those issues that will influence the sector's ability to ensure the availability of adequately skilled labour
 - Suggest a range of possible initiatives which would seek to address the identified issues.

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Barriers to tackling skills issues

2. Skills needs are not sufficiently articulated

The skills task and finish group has considered existing information on skills needs for today and tomorrow, including experience on the ground. The group prioritised skills and broadly defined these. However, it is clear that more work is needed here involving industry and education/training experts.

2.1 Most urgent skills issues in today's forestry workforce

The skills task and finish group agreed that there is limited information on the skills shortages and gaps in today's workforce. However, available evidence and anecdotal evidence from the field provides a good indication of where the main skills shortages and gaps are.

The industry workforce can be divided into different groups. When it comes to skills shortages in the current workforce, the group felt it most useful to divide the workforce into:

- Project managers – these tend to have managerial duties and an academic forestry qualification – Higher National Diplomas or degrees
- Crafts persons – these have practical, hands-on skills and experience and are likely to have an apprenticeship or relevant vocational training, including e.g. chainsaw tickets.

Workers from both these groups are needed to drive forestry forward, and a balance needs to be struck.

At project manager level, the key skills shortages and gaps are:

a) General business skills including:

- business planning
- forecasting of supply, throughput, sales, etc.
- financial literacy, including accounting
- customer services
- understanding the regulatory environment, including an understanding of quality standards and traceability
- planning and organising
- people management.

b) Quality control – particularly monitoring site work in relation to operational plans.

c) Technical skills – machinery operation, including chainsaw, harvesting and forwarding.

d) General land management skills - including drainage, track maintenance, boundary repairs and maintenance, habitat management and access provision.



2.2 Forestry skills for the future

To allow forestry to take advantage of new markets, including those related to carbon, energy and, possibly, to markets for other ecosystem services, the skills task and finish group concluded that the future forestry workforce, in other words today's learners, would need to possess the following skills and abilities:

a) As also mentioned under current skills shortages (2.1), general business skills, including:

- business planning
- forecasting of supply, throughput, sales, etc.
- financial literacy, including accounting
- customer services
- understanding the regulatory environment, including an understanding of quality standards and traceability
- planning and organising
- people management.

b) Ability to innovate and be enterprising, including the ability to start up and grow a business.

c) Spotting opportunities in new markets, in particular the ability to find relevant information and interpret it in a way that allows the business to take advantage of these opportunities.

d) Supply chain management, including a better understanding of markets and processes across the supply chain. This will ensure the business has a good grasp of all markets for its products and understands the needs of both its buyers and suppliers.

e) Silviculture, focusing in particular on harvesting from more difficult terrain and in a changing climate.

f) The ability to link market knowledge to product knowledge to ensure financial viability, e.g. the ability to determine which market is appropriate for which type of log, how much it will cost to deliver timber to this market and what the likely financial gains are, thereby ensuring that the operation is profitable.

While these skills would appear to be mainly relevant to project managers, the high level of self-employment in forestry - 44% are self-employed, compared to an average of 13% nationally⁸ - would indicate that they are relevant at all levels.

Actions

- Lantra's industry group to further research, define, and articulate the skills gaps found within the two workforce categories.
- Lantra to determine how these skills needs are already covered within relevant curricula and how best to tackle any gaps.
- Lantra and Forestry Commission England will feed the skills priorities identified in the action plan into the next review of National Occupational Standards, starting in January 2011. As a result the skills identified will become part of subsequent qualifications.
- Lantra will encourage awarding bodies such as Edexcel, City and Guilds and Lantra Awards to include these skills in any qualifications developed.



⁸ Lantra 2009. Research fact sheet for trees and timber, labour market information www.lantra.co.uk/stakeholders/research-documents/skills-assessment/report

3. Low levels of training among the existing workforce

Weak skills demand from employers feeds weak skills acquisition amongst the workforce, with existing workers lacking motivation to upgrade skills. As a result, the level of training of the existing workforce is low. This could also play a role in discouraging potential new entrants, who could perceive the sector as offering limited opportunities for development.

4. Low profile of forestry among potential new entrants

Anecdotal evidence suggests that forestry has a low profile amongst potential new entrants. Little information appears to be available to those who could be interested in working in forestry. The information that is available does not necessarily focus on careers and/or commercial forestry.

A solution for to this would be to formalise training requirements through contracts. Contractors could be encouraged, or required, to ensure their staff receive a minimum number of Continued Professional Development (CPD) and/or refresher training every year. At managerial level, this could involve formalising the Institute of Chartered Foresters (ICF) CPD requirements. For crafts persons, this could involve a voluntary training register.

UPM Tilhill, a large forestry company, is currently developing a chainsaw refresher training register and is already leading the way by stipulating regular refresher training as part of its contracting procedures.

Actions

- Forestry Commission England will include relevant training requirements in contracts where appropriate and issue guidance on training for contractors.
- UPM Tilhill and Forestry Commission England will work with other large contractors to use their contracting power to drive skills demand among employers.

Actions

- FEI will explore opportunities to extend its activities from children to the 14-19 age group and more closely linking these to careers advice.
- ConFor will invite careers advisors, school children and students to the bi-annual APF International Forestry Exhibition and organise a tour introducing them to commercial forestry and the type of work opportunities it offers.
- Lantra and the National School of Forestry will encourage higher education institutions to explore developing 'taster weeks' for prospective students.

5. Lack of centralised information on training, education, jobs and careers

While some excellent skills and careers initiatives exist around the country, there is no central information platform with all the information a new entrant needs to decide whether he/she will opt for a career in forestry. Nor is there a central platform where job seekers can access all available opportunities in forestry and related sectors, including both vacancies and courses. The Skills Task and Finish Group believes that this market failure prevents those with the right skills and ambitions from entering the profession.

Actions

- Forestry Commission England will investigate opportunities for developing an online portal where third parties can post relevant information on training, education, jobs and careers. This portal would adopt a business model allowing it to become financially independent. Forestry Commission England will develop a business plan for the portal, which will include an assessment of need as well as an exit strategy.



6. Many businesses cannot afford to train apprentices

The forestry sector is dominated by small businesses, many of whom are one to four person operations⁹. In addition, the sector is largely based on producing high volumes of products with low profit margins. Capital investment in expensive machinery is paid back by maintaining high throughput levels. Taking on an apprentice, businesses say, reduces throughput to such an extent that the business may no longer be financially viable.

Moreover, levels of dropout in the sector are a disincentive to investing in apprentices, as suggested by anecdotal evidence. The risk of incurring high costs without reaping the rewards is a further barrier to employer engagement.

Finally, there is a discrepancy between apprentice pay in the public and private sector, with Forestry Commission currently paying several thousand pounds more per year for an apprentice. This undermines the offer of private sector forestry businesses to apprentices.

⁹ Lantra 2009. Research fact sheet for trees and timber, labour market information www.lantra.co.uk/stakeholders/research-documents/skills-assessment/report

Actions

- Forestry Commission England and Lantra will lead on developing an apprenticeship model that allows the cost of, and responsibilities associated with, the apprenticeship to be shared by several employers. Forestry Commission England will investigate options for financial support to kick start the new model.
- Increasing the number of taster sessions (ie practical, hands-on experiences) will help to give potential new entrants a better idea of what it is like to work in forestry and what is expected of them, hence contributing to reducing dropout rates. The Small Woods Association runs a successful taster session entitled 'Week in the Woods'. The Small Woods Association will roll out its Work in the Woods Week as a recruitment event for forestry apprenticeships to other regions of the country, working with Lantra and the private sector through local partnerships.

- Midlands Wood Fuel, currently chair of the Woodfuel Suppliers Group (set up by ConFor and the Renewable Energy Association), will investigate opportunities for members of this group to create training places, including apprenticeship places.
- Midlands Wood Fuel will investigate opportunities for equipment suppliers to create training places, including apprenticeship places.
- Forestry Commission Great Britain has started a review of its apprenticeship schemes across Scotland, Wales and England. This review will consider the disparity in pay between the public and private sector with a view to resolving it.



7. Lack of education-business links

While at a local level there are some good examples of education-business links, more generally the lack of education-business links in the forestry sector means that there are few opportunities for potential new entrants to get a taste of forestry. It also means that educational staff can lack credibility due to limited recent experience in the industry.

Actions

- The businesses on the skills task and finish group – UPM Tilhill, Pryor & Ricket and Midlands Woodfuel – have shown interest in having some of their staff teach part-time. The National School of Forestry already offers associate lecturer positions, where those working in industry teach on a part-time basis. These key stakeholders, together with Lantra, will explore opportunities to increase the number of people in industry teaching at universities and colleges.
- ConFor will investigate options for setting up an education provider group, which would look into taking practical action on skills issues and bridging education-business gaps.

8. Lack of joined-up, cross-sector push for action on skills issues

While many individual stakeholders recognise that skills shortages and gaps need tackling, there is limited evidence of a joined-up cross-sector push for action. The skills task and finish group believe that a joined-up push could lead to significant action across the board, including the potential unlocking of funding for skills activities.

Actions

- The England Forest Industries Partnership (EFIP) will develop a position statement on skills and share it with relevant stakeholders in order to raise awareness of the need to take action.

Annex: Key contacts at each of the partner organisations

Stuart Goodall
Gesa Reiss
Susannah Podmore
Mariska van der Linden
Ros Burnley
Ewan Bent
David Robson
Graham Taylor
Judy Walker
Martin Lennon

ConFor
EFIP
FEI
Forestry Commission England
Lantra
Midlands Wood Fuel
National School of Forestry
Pryor & Rickett
SWA
UPM Tilhill

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