

## **Standard in development**

### **L6: Professional Forester**

#### **Title of occupation**

Professional Forester

#### **UOS reference number**

ST0923

#### **Core and options**

No

#### **Option title/s**

#### **Level of occupation**

Level 6

#### **Route**

Agriculture, environmental and animal care

#### **Typical duration of apprenticeship**

42 months

#### **Degree apprenticeship**

## Target date for approval

18/12/2020

## Resubmission

No

## Would your proposed apprenticeship standard replace an existing framework?

No

## Does professional recognition exist for the occupation?

Yes

## Occupation summary

This occupation is found in governmental, non-governmental, private, public, charitable and local authority organisations in England, Scotland, Wales and Northern Ireland that have an interest in forestry and woodland creation and management. Landowning organisations, e.g. Local Authorities or private estates, may employ their own Professional Foresters, whereas private landowners, e.g. farmers, may bring one in as a consultant.

The broad purpose of the occupation is to provide expert technical advice on the planning, creation, management, harvesting and utilisation of woodlands and forests (known as silviculture). Professional Foresters form the link between landowners, contractors and timber-buyers, providing technical expertise to inform and manage delivery of sustainable multi-purpose forest management outcomes in relation to the UK Government's Forestry Act. Expertise in forest and woodland carbon accounting and land use change are becoming increasingly important for Professional Foresters who will be responsible for writing Woodland Management Plans (WMPs), Forest Design Plans (FDPs) and Woodland Creation Design Plans (WCDPs), using expert knowledge of legislation, regulation and silvicultural good practice, and will be responsible for overseeing the implementation of those plans.

Professional Foresters will be integral to the achievement of Government targets for delivery of public goods under the 25-Year Plan for the Environment, and Net Zero 2050 targets for carbon reduction. In their daily work, an employee in this occupation interacts with landowners and agents, statutory bodies, local authorities, local & national interest groups, ecologists, engineers and other professional experts, timber

buyers, contractors, suppliers, colleagues, volunteers and the public. In many cases Professional Foresters will be required to understand how forestry fits into the wider land-management planning of a given client or organisation and will liaise with other stakeholders to manage conflicting pressures and achieve complementary outcomes. The uniquely long-term nature of forest planning cycles means that many Professional Foresters will have long-term professional relationships with their clients, sometimes spanning decades. In some cases, especially hardwood silviculture, management decisions made by a Professional Forester now may not even come to fruition in their or their clients' lifetime.

An employee in this occupation will be responsible for:

- Autonomous decision making relating to land use change pertaining to woodland operations
- Appropriate decision making within organisational structures (e.g. Woodland Officer reporting to Field Manager)
- Budget management, including applying for and/or administering grant funding
- Awarding and managing contracts to contractors
- Procurement and sales
- Gathering, analysing, interpreting, implementing and communicating information
- Regulatory compliance.

### **Typical job titles**

forester

forestry consultant

forest and woodland advisor

woodland officer

beat forester

planning forester

head forester

forest officer

forest manager

district forester

### Are there any statutory/regulatory or other typical entry requirements?

No

### Occupation duties

Duty	KSBs
<b>Duty 1</b> Provide technical advice related to planning, creation, managing, and harvesting of woodlands and forests, using expert knowledge of legislation and regulation including compliance, land use, budgets, applying for and/or administering grant funding, timber markets, awarding and managing contracts, procurement and sales.	K1 K2 K6 K24 S6 S9 S17 B1 B2 B3 B4 B5 B6
<b>Duty 2</b> Research survey and collect data on established woodlands and forests, and measure, map and record established forest management units (FMUs) using, for example, on-the-ground mapping, geospatial and UAV technology.	K1 K2 K3 K6 S1 S2 S3 S15
<b>Duty 3</b> Survey, collate and interpret silvicultural data on established woodlands and forests for safety, resilience, pests & diseases, tree health, and woodland condition.	K1 K2 K3 K6 K7 K9 K13 S1 S2 S3 S4 S11 S15
<b>Duty 4</b> Survey, evaluate and inventory woodland potential for timber production and communicate results to clients, colleagues and others to inform, for example, commercial timber sales contracts and production forecasts.	K1 K2 K3 K6 K7 K9 K12 K13 K14 K18 S1 S2 S3 S4 S8 S11 S15
<b>Duty 5</b> Collect, analyse and evaluate landscape and environmental information to write Woodland Creation Design Plans for new woodland planting and afforestation schemes.	K1 K2 K3 K6 K7 K11 K14 S1 S2 S3 S4 S6 S15 B6

<p><b>Duty 6</b> Advise clients / landowners / others on the commercial potential for woodland carbon, for example the Woodland Carbon Guarantee.</p>	<p>K1 K6 K7 K9 K10 K11 K12 K13 K14 K18 K24 S8 S9 B1 B2 B3 B4 B5 B6</p>
<p><b>Duty 7</b> Analyse and evaluate silvicultural and other information, for example archaeological, to develop UKFS-compliant forest / Woodland Management Plans for established woodlands and forests.</p>	<p>K1 K2 K5 K6 K7 K8 K9 K10 K14 K23 S6 S8 S9 S12 B6</p>
<p><b>Duty 8</b> Interpret and implement forest / Woodland Management Plans for the management of established woodlands and forests for timber production.</p>	<p>K1 K4 K5 K6 K7 K8 K10 K16 K17 K19 K20 K21 K22 K23 S1 S3 S4 S5</p>
<p><b>Duty 9</b> Provide expert technical advice to others on the development, interpretation and implementation of forest / woodland design creation and management plans.</p>	<p>K1 K5 K6 K7 K8 K10 K11 K12 K13 K14 K16 K17 K18 K19 K20 K21 K22 K23 S9 S10 B1 B2 B3 B4 B5 B6</p>
<p><b>Duty 10</b> Interpret and implement forest / woodland establishment, maintenance and harvesting operations in accordance with forest / woodland design creation and management plans, and production forecasts.</p>	<p>K1 K4 K5 K6 K7 K8 K10 K16 K17 K18 K19 K20 K21 K22 K23 S7 S10 S13 S14 S17 B1 B6</p>
<p><b>Duty 11</b> Plan, manage and be responsible for onsite operations, including health, safety &amp; welfare, legal and regulatory compliance, silvicultural &amp; environmental good practice, compliance with the UKFS, access and haulage.</p>	<p>K1 K4 K5 K6 K8 K11 K15 K16 K17 K18 K19 K20 K21 K22 K23 S7 S10 S13 S14 S17 B1 B2 B6</p>
<p><b>Duty 12</b> Develop, maintain and manage relationships with clients, timber buyers, staff, contractors and volunteers.</p>	<p>K1 K4 K6 K12 K15 K19 K20 K21 K22 K23 K24 S9 S10 S16 B1 B2 B3 B4 B5</p>

# Knowledge, Skills and Behaviours

## Knowledge

**K1:** Glossary of forestry management terms, e.g. stands, sub compartments and compartments, and silvicultural systems, classifications and terminology, e.g. clearfell, PAWS, Yield Class.

**K2:** Application of appropriate survey and assessment techniques relating to information requirements, e.g. techniques for constraints and opportunity mapping, use of LIDAR, remote sensing, satellite imagery.

**K3:** Health, safety and welfare of self and others including compliance with legislation (for example Health and Safety at Work Act (1974)), industry guidelines and best practice (for example FISA guidance).

**K4:** The principles of the UK Forestry Standard (UKFS): biodiversity, historic environment, climate change, landscape, people, soils, water; the UK Woodland Assurance Standard (UKWAS); The Forestry Act 1967.

**K5:** Use of Woodland Management Plan templates and tools.

**K6:** The factors affecting tree growth and woodland condition including species selection.

**K7:** Data interpretation techniques for example pest / disease symptom identification, natural capital assessment, climate change impacts.

**K8:** Silvicultural techniques for woodland management, for example selective thinning, clearfell.

**K9:** Manual, digital and remote silvicultural mensuration techniques, for example Blue Book, digital reloscope, satellite imagery.

**K10:** Market requirements and sector intelligence, for example timber prices, production forecasts.

**K11:** Woodland creation and forest design principles, including regulatory requirements, for example Environmental Impact Assessment, Landscape Character Assessment, designations (priority habitats); effects of land use change (carbon sequestration and flood management); site suitability and species / provenance / stock selection and use of appropriate decision support tools (Environmental Site Classification

(ESC), carbon calculators).

**K12:** Strategies and techniques for stakeholder engagement, for example consultations, media relations.

**K13:** Silvicultural systems in relation to carbon modelling and accounting, sequestration and climate change mitigation.

**K14:** Woodland carbon finance in relation to carbon markets, the Woodland Guarantee, the Woodland Carbon Code and incentives such as the Woodland Carbon Planning Grant.

**K15:** Performance management techniques, including self-reflection and management of others.

**K16:** Legislation and regulation relating to forestry, for example Environmental Impact Assessment, Statutory Plant Health Notices, Felling Licences, Restock Notices, and best practice (FISA Guidance) when undertaking forest works.

**K17:** Legislation and regulation relating to wider land use for example Public Rights of Way, Countryside Rights of Way, Town and Country Planning Act, use of UAV's, Countryside and Wildlife Act, European Protected Species.

**K18:** Woodland finance, including timber and land markets & values, grant and incentive regimes, investment forestry, budgeting.

**K19:** Planning, resourcing and procurement of forest works, including seasonal and operational implications for working and impact on the environment, in line with UKFS requirements and guidance.

**K20:** Responsibilities in relation to risk to people including dynamic site / operation risk assessment, lone working, safety software (for example what3words), promoting safety culture, public safety.

**K21:** Factors affecting the planning, management and mitigation of risk on a forest works site (Forest Works Supervisor role), for example biosecurity, pollution control, environmental factors.

**K22:** Operational management of establishment, maintenance, harvesting and restock sites, including roles and responsibilities of land owner, works supervisor, contractors and sub-contractors (in line with FISA guidance and industry best practice), including record keeping and document management.

**K23:** Safe and effective methods for timber handling, storage, haulage and roading.

**K24:** Preparation of tenders and sales contracts.

## **Skills**

**S1:** Spatial awareness and use of navigation aids, for example map reading and use of compass, digital technology, off road driving.

**S2:** Accuracy in mapping, data recording and representation.

**S3:** Identifying, classifying and prioritising different sources of information.

**S4:** Use of digital technology to conduct desk-based surveys.

**S5:** Apply accurate mensuration techniques.

**S6:** Write a Woodland Management / Creation Design Plan, grant application.

**S7:** Produce and manage operational assessments / schemes of work / operational plans.

**S8:** Develop complex silviculture modelling scenarios including carbon, land use, land owner objectives, timber / other income.

**S9:** Communicate with others using varied means, for example digital, written, verbal, presentational (maps & sketches).

**S10:** Establish and manage internal and external relationships, for example contractors, media, stakeholders.

**S11:** Select and apply appropriate tool or application for task, for example MyForest, Felling Licence Online, Ecological Site Classification Tool, ForestGales

**S12:** Select and apply appropriate silvicultural systems to achieve management objectives.

**S13:** Manage risks to the environment including pollution, biosecurity, seasonality.

**S14:** Manage risks to people including dynamic site / operation risk assessment, lone working, safety software (e.g what3words), promoting safety culture, public, First Aid at Work +F.

**S15:** Collate, analyse and interpret information and make recommendations.

**S16:** Develop and maintain effective information networks and professional development.

**S17:** Plan and resource operations including preparation of tenders and sales contracts.

## **Behaviours**

**B1:** Act with integrity - always put the interests of your clients or others to whom you have a professional responsibility above your own and respect their confidentiality. Always consider the wider interests of society when making your judgments.

**B2:** Always provide a high standard of service - be open and transparent in your dealings. Share the full facts with your clients, making things as plain and intelligible as possible.

**B3:** Treat others with respect - treat everyone fairly with courtesy, politeness and respect and consider cultural sensitivities and business practices.

**B4:** Take responsibility - be accountable for all your actions. Take full responsibility for your actions and do not blame others if things go wrong.

**B5:** Act in a way that promotes trust in the profession - set a good example. Remember that both your public and private behaviour could affect your own reputation and that of the industry.

**B6:** Have regard for sustainability throughout your work - practice your profession with due regard to sound ecological, social, economic and environmental principles to the advantage of present and future generations.

## Qualifications

### English & Maths

Apprentices without level 2 English and maths will need to achieve this level prior to taking the End-Point Assessment. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

### Does the apprenticeship need to include any mandated qualifications in addition to the above-mentioned English and maths qualifications?

No

### Professional Recognition

This standard has professional recognition.

Body	Level
Institute of Chartered Foresters	MICFor