

Environmental conservation embraces the management of landscapes, habitats and species (in urban, rural, coastal and marine environments) alongside countryside and coastal access, recreation and interpretation to promote awareness, understanding and enjoyment. There are some overlaps with wider environmental management activities including recycling, flood risk management, energy production from waste and pollution reduction.

Overview

The industry also covers landscape management at policy, planning and technical levels, together with the maintenance of rivers and waterways. Large organisations such as Natural England, Scottish Natural Heritage, BTCV, the Royal Society for the Protection of Birds, the National Trust, the National Trust for Scotland, National Park Authorities, Wildlife Trusts and the Woodland Trust among others are involved in this industry.

It is important to note that many other organisations, such as Local Authority Environment Directorates and land-based businesses will be involved in environmental conservation to some extent, although this may not form the majority of their business operations. Therefore these are currently excluded from the business numbers.

In most cases, an industry can be classified (or defined) by Standard Industrial Classification (SIC) codes. Lantra's environmental conservation industry is only partially defined by the latest SIC code definitions, specifically 'environmental consulting activities' (SIC 74.90/1).

As the industry is not well defined by SIC, we can turn to using Standard Occupational Classification (SOC) codes. The relevant SOC codes within the industry include 'natural environment and conservation managers' (SOC 1212), 'conservation and environmental protection officers' (SOC 3551) and 'countryside and park rangers' (SOC 3552).

Business figures¹:

Business data is not available for SIC 74.90/1, therefore data has been sourced from an alternative business database based on Yellow Pages classifications for 'environmental consultants' and 'conservation organisations'. This database estimates some 2,580 businesses in the UK.

Businesses by size^{1*}:

Business size data is not available for 'environmental consulting activities' (SIC 74.90/1), however, a small area of environmental conservation (nature reserves) sits within SIC 91.04/0 'botanical and zoological gardens and nature reserve activities'.

Data for SIC 91.04/0 reveals that businesses have a slightly larger than average business size; 61% have a workforce of fewer than ten members of staff, compared with 83% across all businesses in the UK. Just over one quarter of businesses (26%) have between ten and 49 employees and 13% have 50 or more employees compared with 14% and 3% across all businesses in the UK.

Employment figures²:

- Official statistics estimate there are 73,300 people employed in environmental conservation in the UK. Around 200,000 volunteers are also actively involved.

Size and scope

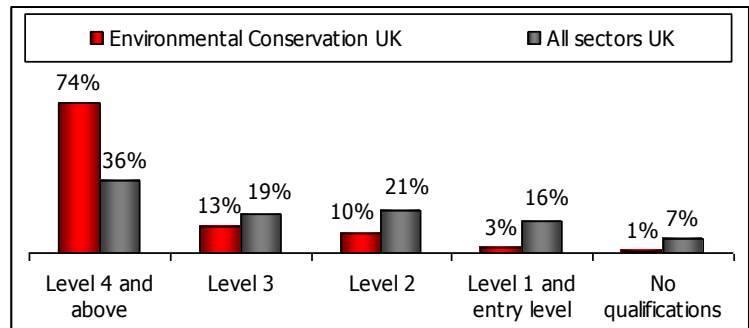
Nation/Region	Businesses ^{1, 3}		Employment ^{2, 3}	
UK	2,580	100%	73,300	100%
Northern Ireland	80	3%	600	1%
Scotland	340	13%	5,600	8%
Wales	160	7%	5,700	8%
England	2,000	77%	61,400	84%
East Midlands	120	5%	2,990	4%
East of England	260	10%	6,650	9%
London	200	8%	8,700	12%
North East	100	4%	3,500	5%
North West	240	9%	8,450	12%
South East	380	15%	9,950	14%
South West	320	12%	7,550	10%
West Midlands	220	8%	6,100	8%
Yorkshire and the Humber	180	7%	7,550	10%

Workforce demographics²

Gender			
Male	73%	Female	27%
Age band			
16-24	6%	45-54	21%
25-34	26%	55-64	7%
35-44	38%	65+	3%
Employment			
Full-time	87%	Part-time	13%
Ethnicity			
White	99%	Non-white	1%
Occupations			
Managers and senior officials (e.g. national park officer, head of environment)	23%		
Professional occupations (e.g. senior ecologist, senior ranger)	33%		
Associate professional and technical occupations (e.g. access/countryside/education/environmental policy officer)	31%		
Administrative, clerical and secretarial occupations (e.g. events organiser, volunteer coordinator)	10%		
Skilled trade occupations (e.g. dry stone walling contractor)	0%		
Personal service occupations (e.g. community recycling officer)	0%		
Sales and customer service occupations (e.g. visitor centre assistant)	4%		
Transport and machine operatives (e.g. estate worker)	0%		
Elementary occupations (e.g. voluntary/seasonal ranger)	0%		

Qualifications²

The sector workforce is highly skilled and official statistics show that 74% of the workforce are qualified to Level 4 and above (graduate level) compared to 36% for the national average and only 1% have no qualifications². Although, the industry appears to have a large number of individuals qualified to Level 4 and above, this is their 'highest' level of qualification and tends to reflect university attendance. Employers will look for Level 2/3 vocational qualifications that show that the applicant can do the practical elements of the job.



Learning supply

- Around 20 apprentices undertook a framework in environmental conservation in 2007-08 in the UK⁴
- An estimated 3,370 learners enrolled on qualifications or courses delivered by Further Education colleges/work-based learning in environmental conservation related subjects in the UK in 2008-09⁵; ranging from professional qualifications to leisure courses
- Popular qualifications include the BTEC First Diploma in Countryside and Environment, HNC/D in Countryside Management
- The industry had an estimated 13,260 learners undertaking related qualifications at Higher Education Institutions in the UK in 2008-09⁶.

Employment projections 2010-20^{7,9}

- In the next ten years (2010 to 2020) forecasts estimate that the environmental conservation industry will need a minimum of 36,000 more people⁷
- The largest need for people is expected to be for skilled trades occupations (7,000), managerial occupations (6,000), sales and customer service occupations (6,000) and elementary occupations (5,000)
- Over the period 2010–20, it is estimated that the following amount of people will be needed:
 - 2,000 at qualification Level 5 (postgraduate)
 - 7,000 people at Level 4 (graduate)
 - 8,000 people at Level 3 (A Level)
 - 9,000 people at Level 2 (GCSE A-C)
 - 7,000 people at Level 1 (GCSE D-G)
- Forecasts suggest that 4,000 people without qualifications will be needed.



Skills issues⁸

Between 2008—10, the Natural Environment Research Council led the review of higher level skills needs in the environment sector on behalf of the Environment Research Funder's Forum (ERFF). In total, the review identified 224 skills needed by those working on issues connected with the natural environment. In particular, it identified 15 critical skills that are in short supply:

- Computer modelling (of coastal, climate and soil systems)
- Multi-disciplinarity
- Data management
- Numeracy
- Translating research (into plain language for the wider community to understand)
- Fieldwork
- Risk and uncertainty
- Taxonomy and systematics
- Soil science
- Environmental epidemiology
- Sustainability science and planning
- Microbiology
- Food supply
- Energy supply
- Freshwater science.

These skills are vital to enable the UK to develop and apply new technologies, respond to the impacts of climate change and extreme weather and improve our knowledge and understanding of environmental issues. Skills needs across environmental conservation continue to change, and industry organisations currently report an increasing demand for:

- Technical and job-specific skills (e.g. species and soil ecology, environmental impact assessment, fund-raising, volunteer management)
- Leadership/management skills (e.g. project management; legislative control and compliance)
- Essential skills (e.g. literacy, numeracy and communication and customer relations)
- Information, Communication and Technology (ICT) skills cannot be taken for granted and are focused on higher level skills (e.g. data capture systems, GIS mapping, GPS).



Drivers for change

Economic conditions

The current state of the economy may have a negative impact upon the availability of consultancy work in and around environmental conservation organisations. Future reductions in public sector money through central government cutbacks will require organisations to adopt increasingly more innovative approaches to generate external funding; cuts in public spending are resulting in loss of skilled and experienced conservation staff. **On the upside, the shift of emphasis in agricultural practice from food production with no environmental damage towards food production with environmental enhancements presents an opportunity to broaden the influence of conservation.**

Impact on skills

- Identifying and generating funding opportunities
- More community engagement
- Sales, marketing, ICT and commerce
- Broader skill base.

Legislation

There is a need to identify, predict, evaluate and mitigate the biophysical, social and other relevant effects of legislation such as the Marine & Coastal Access Act 2009, the Equality Act 2010 while working for example with volunteers and comply with European legislation like habitat management and community resilience.

Impact on skills

- Legislation and consumer rights
- Knowledge and understanding of legal obligations and consumer rights.

Labour supply and competition

There is already a lack of appropriately skilled staff in the industry; however, the industry finds it increasingly difficult to attract suitable staff in some areas. There is also a heavy reliance on volunteer workers. The sector needs to raise its profile in order to attract young people, career changers and non-traditional groups. On the upside, a recent image shift (due in part to 'carbon footprint' preoccupations) has seen environmental conservation organisations develop a more professional reputation. Vocational entry routes are **increasingly being valued by employers, although** graduate level qualifications are still required by some.

Impact on skills

- **Effective marketing of careers**
- **Better careers advice and guidance for all**
- **Proper recognition of competence for all**
- **Integrated frameworks to support lifelong learning and Continued Professional Development (CPD).**

Climate change

Environmental conservation organisations are well-placed and have appropriate expertise to help address climate change through improving sustainability skills, increasing accountability (e.g. 'carbon capture' and lower carbon emissions, manage chemical usage), planning longer term business strategies, protecting surrounding landscapes and scarce water supplies, and supporting bio-diversity. Climate change is also likely to impact upon pest numbers/types and disease rates.

Impact on skills

- Adoption of methods to mitigate climate change
- Respond to specific skills/re-skilling issues
- A need for specialist skills such as ecology and environmental management
- Knowledge and control of new pests and diseases
- Knowledge transfer
- Research into new methods and processes
- Technology transfer
- Training to use new technologies.

Globalisation

Affects the daily performance of businesses primarily through changes in global economic and social conditions (e.g. oil prices, carbon footprint, market recession). Multinationals increasingly adopt their own training programmes, which are not necessarily in line with mainstream activities. Some positive impacts have occurred in that basic ICT proficiency levels have increased. A number of environmental conservation organisations are well-placed to influence, and are actively involved in, international environmental initiatives.

Impact on skills

- Requirement for common standards and competence checks
- Influencing skills for those in advisory positions
- Need for effective partnership working across international boundaries.

Health and safety

Given the size of the industry, including the activity of volunteers, problems invariably lie in managing, standardising and enforcing health and safety policies and practices. Requirements seem to change on a weekly basis; this makes it difficult for businesses and organisations to stay up-to-date.

Impact on skills

- Awareness raising training
- Risk assessment training
- Recognition of health and safety competence.

Rural and urban regeneration

- Legislation such as the Countryside and Rights Of Way Act 2000 has improved accessibility to the countryside. This in turn potentially impacts on land management (e.g. access provision, habitats/nesting)
- Recent child obesity issues have generated a strong need to upgrade available sport and leisure amenities
- From a community perspective, the industry is central to improving social cohesion through its influence on physical and mental well-being.

Impact on skills

- People management and customer care skills
- Partnership working e.g. with the NHS.

Sources and information

1. Experian National Database 2010
2. Labour Force Survey (LFS) 2009-10 (based on SIC 74.90/1 but including SOC 1212, 3551 and 3552 for employment figures only) * CAUTION: business size data based on SIC 94.04/1 which includes nature reserve activities and botanical and zoological gardens which do not fall within Lantra's industry footprint, therefore data should be used indicatively
3. Figures and percentages may not add up due to rounding
4. Data Service (England), DCELLS (Wales), Skills Development Scotland/Scottish Funding Council (SDS/SFC), DARD/DEL (Northern Ireland)
5. Data Service (England), DCELLS (Wales), Skills Development Scotland/Scottish Funding Council (SDS/SFC), DARD/DEL (Northern Ireland)
6. Higher Education Statistics Agency (HESA)
7. Lantra Model for Employment Forecasting (LMEF) 2010. Figures represent estimates of minimum job openings to satisfy replacement and expansionary demand. This may be higher or lower depending on future conditions.
8. Environment Research Funders' Forum (2010) Most wanted Skills Needs in the Environment Sector
9. Figures are rounded to the nearest 1,000.

Lantra website

For further information regarding this factsheet, Lantra and the sector, please visit: www.lantra.co.uk



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