

Environmental & Conservation Careers

Types of environmental careers

According to LANTRA there are approximately 230,000 businesses and around 1.1 million people working in land-based industries (including environmental industries, animal health and welfare, land management and production), with about 95,000 in environmental conservation alone. 90% of the businesses are SMEs employing fewer than 10 people, many are self-employed. There are around 500,000 volunteers, many in the environmental and conservation sector. Expectations are that the sector will continue to grow. Austerity measures have affected some job prospects in the short-term but the long-term trend is up.

At the National Careers Guidance Show in February 2012, Labour Market Intelligence Analyst Michael Spayne reported that the Low Carbon Economy and drive towards a 'sustainable society' will lead to more 'Green Collar Jobs' - defined as 'a job reducing waste and pollution which benefits the environment'. Sectors expected to see job creation include:

1. Renewable Energy - especially in R&D and manufacturing (increase in jobs by 70,000 by 2020)
 2. Recycling and Waste Management - as Government targets aim for 50% of household waste to be recycled by 2020, jobs in the sector are forecast to rise by 60,000 by 2020.
 3. Energy efficiency (especially making domestic properties more energy efficient)
 4. Construction - there will be a shift to factory-produced components for buildings which are assembled on site. This will lead to a change in how construction is done, using different skills to the traditional construction crafts.
- Other sectors anticipated to experience significant growth are agriculture, conservation, forestry and eco-tourism.

The sector has a huge range of opportunities available and, although not always highly-paid, job satisfaction can be immense. Below is a list of some broad occupational areas to give you an idea of the breadth of options. The jobs within them can be very varied so be prepared to be flexible in your search for employment and job role expectations.

Agriculture and Soil Science - Biotechnologies will play a larger role in creating more global food supplies, resulting in a range of job opportunities, from research to farm management consultancy.

Corporate Social Responsibility - Many businesses now have CSR policies, making it a growth area. Policies outline how the business will behave ethically and contribute to economic development while improving the quality of life of staff, local communities and society - including environmental and conservation concerns.

Campaigning - most train and work in specialist skills such as science, law, IT, PR and marketing.

Drinking Water Quality and Wastewater Management - The increasing population and growth of the economy over the long-term is likely to boost demand for essential water and wastewater services.

Eco Art - Can serve different purposes such as helping to educate people about environmental problems or by aesthetically improving environments.

Eco Tourism and Recreation - 'Green' tourism, outdoor pursuits and working holidays, which achieve a balance between conservation and recreation, are becoming more popular with increasing wealth, travel and leisure time over the long-term.

Education - New values towards the environment, skills for managing it and knowledge to understand it means more demand for university courses and research, school curriculum development, as well as professional training courses.

Energy - With climate change a global priority, demand is growing for technologists, engineers and managers who can improve energy efficiency in the home and workplace, and develop renewable technologies.

Environmental Engineering and Eco-design - Tighter regulation and specifications stimulate the R&D market and manufacture of new, energy efficient, cleaner plants and production equipment.

Environmental Health - Environmental health officials involved in protecting people from environmental health risks have increasing opportunities to diversify into other fields in central government, consultancies and private sector as well as in the developing world, where they work to ensure sustainable development.

Environmental Impact Assessment and Auditing - EU legislation and its UK implementation creates jobs for environmental auditing and assessment.

Environmental Law, Development Control and Regulation - A key driving force behind many environmental initiatives has been the rapid increase in environmental law and legislation, especially from the European Union. Increasing litigation is creating a new discipline of environmental advocacy.

Environmental Risk - Growing trend of employment in modelling and risk assessment as decision-makers in private consultancies (on behalf of clients) as well as NGOs attempt to make best use of environmental data.

Ethical Marketing - Roles such as advertising, PR, product development, sponsorship and research.

Financial Management - Environmental economics covers ethical investments, mortgages, and enterprise development.

Fisheries – Numbers employed in water companies are fairly stable with growth in public sector and private consultancy carrying out Environmental Impact Assessment (EIA) and other environmental management work.

Flood Defence and Coastal Erosion Risk Engineering - Sea level rise and changes in weather patterns means flood and coastal erosion risk management is becoming a high priority political issue, with Government investing in R&D.

Food Production - With increasing demand for (organic) food, many farmers, food processors and retailers will need advice, training, accreditation and consultancy from environmental professionals.

Forestry - Amenity tree care and disciplines such as urban, environmental and social forestry are developing alongside community woods and educational forests.

Environmental Research, Mapping & Measurement - Includes research on environmental sustainability, environmental informatics, human health and the environment, marine management and waste management. Environmental information systems, software and the management of environmental data are clear growth areas in the environmental career market - including GIS and IT professions.

Journalism - Our appetite for news about environmental and conservation issues provides opportunities in newspapers, magazines, television and especially online media.

Landscape - Urban regeneration is a Government priority creating jobs in planning, design and maintenance. Charities and agencies have been set up to co-ordinate green spaces, including Lottery-funded restorations.

Marine Conservation – The threat of climate change should create roles in planning and managing activities that impact on marine life.

Nature Conservation and Biodiversity - Conservation covers rural and urban landscapes; flora and fauna; recreation and education; and maintenance and enhancement of the environment. Biodiversity embraces our efforts to protect wildlife. With declining biodiversity, there is some growth in jobs related to research and monitoring biodiversity as well as conservation and restoration management although it isn't a huge employer compared to others in the environmental sector.

Policy - All local authorities, Government departments and agencies like National Parks or the Crown Estate now employ environmental professionals, as policies and strategies need proofing for their inclusion of sustainable development.

Pollution Control (water / air / land quality) - With many aspects of air and water pollution improving, there is relatively more focus on the monitoring and remediation of contaminated land, as pressure mounts for housing and commercial development.

Regeneration (sustainable) - With the demand for more housing development, urban regeneration, sustainable design and reused building materials, there is a need for environmental professionals to work in teams with architects, surveyors, property developers, designers and planners.

Transport & Logistics - As a major contributor to climate change, transport and travel organisations as well as manufacturers will have to employ or contract more environmental professionals to work alongside engineers, designers and logistics managers. Sustainable travel initiatives exist such as 'Sustrans'.

Waste Management & Recycling – With a tradition of poor waste management, there is mounting pressure, and hence increasing jobs, for giving advice to householders and businesses, zero waste management, recycling, and the market development of recyclates.

Waterways - Canals are being restored particularly in recognition of their social and environmental benefits, creating a small number of jobs in advisory roles as well as volunteer co-ordination.

Wildlife management - Scientists; wildlife management consultants, communication and education specialists; and enforcement officers need to work together with industry, governments, local authorities, NGOs, landowners, nature reserves and communities to protect wildlife.

Youth and Community Work - Volunteer managers and community workers will increasingly require professional experience as environmental volunteering becomes more popular.

It is important not to confuse 'conservation' with 'environmental activism' and try to keep personal views out of your professional work where possible and appropriate.

Useful websites for further information

- www.lantra.co.uk/careers: includes information about hundreds of graduate and non-graduate level occupations in land-based industries.
- www.ciwem.org/information-and-resources/careers.aspx: Chartered Institution of Water and Environmental Management has job profiles for a range of employment sectors.
- www.cieem.net/employment-sectors: information about ecology and environmental occupations in different employment sectors plus a downloadable booklet, *Rooting for a Career in Ecology or Environmental Management* - www.cieem.net/students-publications
- www.naturenet.net: independent countryside and conservation website has a careers section with useful tips plus links to other useful websites.
- www.growcareers.info: careers information and case studies including plant science and technology.

- www.iema.net/access-environment-careers-advice: Institute of Environmental Management and Assessment careers information.
- www.the-ies.org/careers: Institution of Environmental Sciences case study videos plus details of its mentoring scheme, talks and other opportunities for members to network with professionals.
- www.kent.ac.uk/careers/Environment.htm ^{PCMP} has some useful information on a range of careers in the environment, biodiversity and wildlife management.
- Guardian Careers: www.theguardian.com/careers and Guardian Professional Network: www.theguardian.com/guardian-professional have lots of useful advice and discussion on environmental and conservation careers.
- www.sgr.org.uk: search the Scientists for Global Responsibility 'Publications' section using the keyword 'career'.
- careers.conbio.org/careers: career ideas with a more international outlook
- www.prospects.ac.uk/jobs-and-work-experience/job-sectors: select either 'Environment and Agriculture' or 'Science and Pharmaceuticals' for occupational information about graduate jobs in that sector.
- Look out for careers events held by some of the professional associations and societies, for example, the British Ecological Society runs careers days: www.britishecologicalsociety.org/careers/events

Getting into environmental / conservation roles

Even if you have an appropriate degree and/or post-graduate qualification, many employers look for candidates with a good deal of relevant work experience – even for the most junior level jobs. Those with 6 to 12 month's experience, through placements or volunteering, have more options. Although further study or postgraduate research is essential for some roles, for other positions do not assume that it will automatically set you apart from other candidates; work experience and volunteering is often the key to success in such cases. If you can't find a graduate level position, be prepared to 'get your foot in the door' through temporary or part-time jobs with organisations - that way, you might be in the right place at the right time if a more relevant job comes up. Make sure you have the right practical skills for the job, eg. you might benefit from undertaking a species identification course to boost your CV.

Most employers will look for a range of personal skills (eg. communication and interpersonal skills, the ability to work as part of a team, flexibility), in addition to your academic knowledge and discipline-specific skills. They will also expect you to have a good knowledge of what they do, the organisation's values and business focus as well as the challenges or issues it might face on a regular basis. Keep up to date with what is happening in the environmental and conservation sector through websites and social media such as the Chartered Institution of Water and Environmental Management – CIWEM (www.ciwem.org), Institute of Environmental Management and Assessment - IEMA (www.iema.net) and BusinessGreenDaily (www.businessgreen.com). The Guardian Professional Networks website is also useful (www.theguardian.com/guardian-professional). Look at websites for other relevant professional bodies (the University Library has a Directory of British Associations to help you locate relevant professional bodies and their websites). In addition, investigate what is written on the websites of individual green employers. You also need to be able to articulate to employers why you want the job and why you'd like to work for them. The University Library gives you access to Business Source Premier for company profiles and content from business & trade magazines; Mintel market research reports and sector-specific information; and Nexis for global news and business information (www.shef.ac.uk/library/subjects/company).

Job hunting / finding work experience / volunteering

Don't just rely on one method to find a graduate role or work experience – use a mix of the suggestions outlined below to maximise your chances. Opportunities can crop up at any time - whether paid or unpaid. It is a case of taking the initiative to email people, ask questions and find out more to show your enthusiasm; don't delay contacting people because someone else may beat you to it!

Advertised vacancies – useful websites include: www.newscientist.com; www.nature.com; www.environmentjobs.co.uk/joblist_all.cfm; www.environmentjob.co.uk/jobs; www.environmentjobs.com; jobs.environmentalisonline.com; www.countrysidejobslink.co.uk; www.countryside-jobs.com; www.earthworks-jobs.com; www.cieem.net/jobs; www.the-ies.org/jobs; www.ciwem.co.uk; www.utilityjobsearch.com; www.ciwem.org/information-and-resources/jobs-market.aspx; www.jobs.ac.uk; www.lgjobs.com; www.civilservicejobs.service.gov.uk/csr/jobs.cgi; www.defra.gov.uk; www.forestry.gov.uk; www.environment-agency.gov.uk/jobs; www.naturalengland.org.uk; www.wildlifetrusts.org; www.delacyexecutive.co.uk/graduates; www.horticulture.org.uk; www.growcareers.info; www.cnp.org.uk; www.thecrownestate.co.uk; www.groundwork.org.uk; www.carbontrust.com; www.ntjobs.org.uk; www.rspb.org.uk/vacancies; www.changeagents.org.uk; www.greenjobs.co.uk; www.greenroles.co.uk; www.bats.org.uk/pages/vacancies.html; butterfly-conservation.org; www.swift-conservation.org; freshwaterhabitats.org.uk; bumblebeeconservation.org; www.wwt.org.uk; www.therivertrust.org

Also check out Guardian Careers, which regularly features articles relating environmental / conservation careers: www.theguardian.com/careers and, for news and jobs: www.theguardian.com/uk/sustainable-business

NOTE: Many of the websites mentioned above have 'links' pages, which contain web addresses for other useful websites. Also use **Career Connect**, which is accessible to all students via MUSE. If you want to stay in Yorkshire, use Yorkshire Graduates: www.yorkshiregraduates.co.uk

Think beyond the obvious, many engineering firms, agricultural consultancies, utility companies and multi-functional consultancies might employ you in an environmental-related roles. Examples include: AB Agri www.abagri.com; ADAS www.adas.uk; AECOM www.aecom.com/careers; Atkins careers.atkinsglobal.com; Black and Veatch bv.com/worldwide/United-Kingdom; JBA Consulting (flood risk consultancy); www.jbaconsulting.com; ExxonMobil www.exxonmobil.co.uk/UK-English/HR/careers.aspx; United Utilities corporate.unitedutilities.com/working-for-united-utilities.aspx; Yorkshire Water www.yorkshirewater.com/careers.aspx

Speculative applications – Not all organisations advertise vacancies, so it is worth making speculative approaches to organisations you would like to work for. For example, Ecus, an international environmental consultancy with a local office, are happy to receive speculative approaches for work experience. Speculative approaches are also a good way to get into smaller organisations which don't have big budgets to advertise opportunities or might not be formally seeking a new recruit but might be persuaded by your application - remember up to 90% of land-based employers have fewer than 10 employees. See www.shef.ac.uk/careers/students/jobs/creative for some tips on researching employers and also talk to your tutor or a Careers Adviser for suggestions. For example, websites such as the ENDS Directory (www.endsdirectory.com), WEM magazine's Consultant File (www.theenvironmentmagazine.com/consultants-file.aspx) or the international Environment Directory (www.webdirectory.com) could be useful in identifying organisations to approach, particularly consultants. Check the websites of professional bodies and societies listed in this handout for a list of members or links to other organisations in a range of sectors.

If you can, find out the name of the person who recruits on behalf of the organisation and then contact them by telephone or email (NB: by talking to someone on the phone rather than in writing, you might stand a better chance of putting across your enthusiasm as well as being able to negotiate on what sort of work you'd be happy to do). Before you make contact, be ready to outline your interests and the kind of work you are looking for. Keep your CV up to date and make sure it highlights all your relevant skills, experiences and knowledge. Be prepared to apply for any type of work, however menial in the first instance, and be persistent.

Recruitment agencies - There are a number of recruitment agencies specialising in environmental and conservation jobs. These include: Acre Resources (acre.com); Allen & York (www.allen-york.com); Anders Elite (www.anderselite.com); CK Science (ckscience.co.uk); Evergreen Resources (www.evergreen.org.uk); Reed (www.reed.co.uk); SRG (www.srg.co.uk); WasteRecruit Ltd (www.wasterecruit.com); Protemp (www.protempjobs.com) and Index Environmental (www.indexenvironmental.co.uk). Use the Recruitment and Employment Confederation to identify other recruitment agencies (www.rec.uk.com/business-support/about-us/jobseekers2). Be specific in your job requirements and keep in touch with recruitment agencies regularly to remind them that you are still in the job market. Prepare to be flexible in terms of the type of job, location and salary you expect – you may be exposed to interesting jobs that you hadn't thought of before and, once you are working for an organisation, you may find other opportunities arise.

Networking – Ask friends, family and tutors for contacts, stressing that you want information and advice rather than merely expecting a job offer. These contacts may give you further contacts and so on. This can be a long process but you will gain a lot of relevant information. Join local conservation groups (including the University's Natural History Society) and consider joining professional bodies or learned society like CIWEM, IEMA or British Ecological Society as a student or graduate member, which will give you access to social and professional networking opportunities such as conferences, seminars and site visits. LinkedIn (an online social network) is also useful, as you can build a network of individual contacts as well as join relevant professional networking groups. Twitter and Facebook can also help you expand your network of contacts. To find out more about social media see www.shef.ac.uk/careers/students/gettingajob/media

CVs and application forms - You'll need to prove you have the skills employers want. Find out what these are from the job description or call the recruiter for an informal chat. The crucial key skills are a mix of experience (eg, field work), technical skills (such as data management, statistics and GIS) and personal abilities (eg, problem-solving, report writing, verbal communication and presentation, project management, a driving licence and possibly foreign language skills).

Finally, the British Ecological Society has top tips for getting into ecology, which could also be applied in other sectors: www.britishecologicalsociety.org/wp-content/uploads/Top-10-tips-for-getting-a-career-in-ecology.pdf