

# CIEEM Skills Gap Project

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CIEEM has recently conducted a second Skills Gap Project. The first resulted in the launch of a degree accreditation scheme and the development of the Competency Framework in 2013, which was revised in January 2016.

A combination of recent changes affecting the profession, such as Chartered status, emerging large infrastructure projects, austerity cuts affecting statutory agencies and local authorities, and uncertainty surrounding Brexit, suggested it was time for a new Skills Gap enquiry. The results of a members' skills survey, carried out in summer 2016, were reported to the November 2016 conference, at which workshops enabled issues to be explored. A follow-up survey, targeting employers, was conducted early in 2017. This article summarises the results and considers the implications for CIEEM and the higher education institutions (HEI) sector.

The Members' Survey asked about skills acquired in the recent past, those envisioned as needed in future and motivation for developing new skills. Up to three answers could be given to each question and analysis revealed that management and communication were the most frequent responses, as shown in Figure 1.

All members were sent the questionnaire and 319 responded. However only 246 completed the last section and, as this contained personal information, full analysis has not been possible. The available data, compared with overall membership statistics revealed that 20% of Fellows, 6.4% of Full, 3.5% of Associate and just 1.2% of Graduate members completed the questionnaire. The low proportion of early career grades is particularly disappointing as it is likely these would have greater training needs,

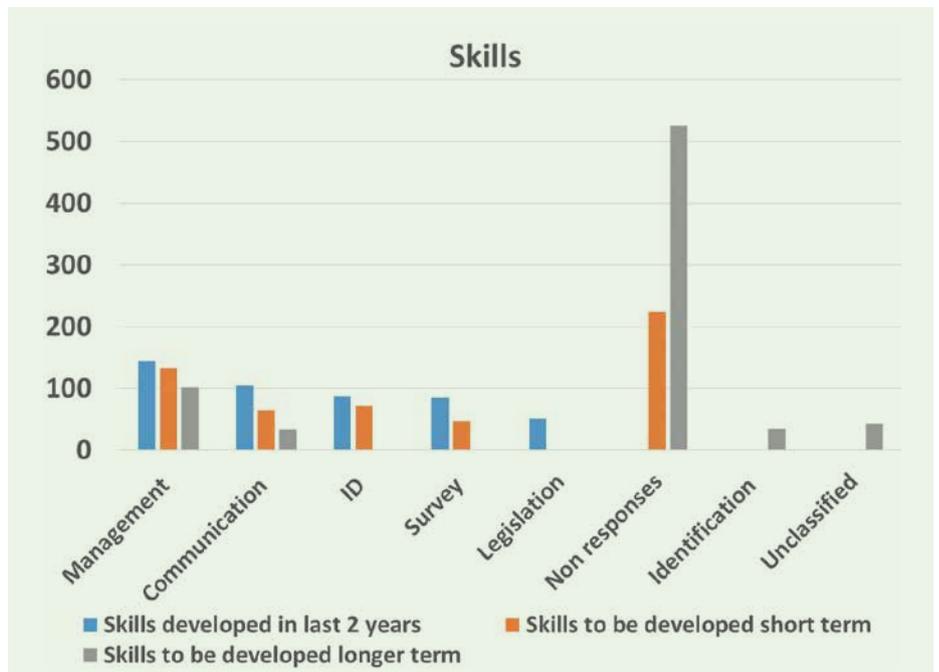


Figure 1. Most frequent skills identified by respondents

and these would be different to those of established professionals.

The workshops took place during the Autumn Conference, held in Nottingham on 1-2 November 2016<sup>1</sup>. A brief presentation introduced the Project and summarised the questionnaire results as a context for delegates to consider why management and communication skills are a key issue; whether this was education failing to provide a good foundation, lack of adequate support for building on basic skills in career progression, or changes in work place requirements.

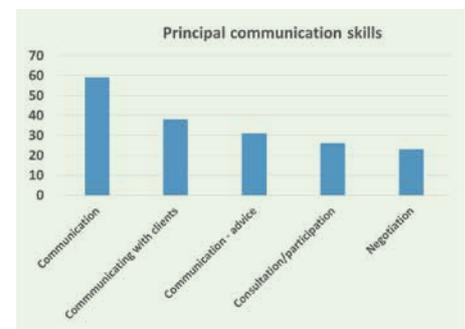
Most initially felt that they had not been taught project management. Discussion revealed that completing assignments to deadlines, undertaking research projects and group work are core programme components and fundamental to developing project management skills. There was a clear message that proficiency in communication should develop with career progression, with differences in written and verbal skills identified and consensus that uniformity is not realistic. Dealing with awkward clients and breaking bad news were highlighted as specific areas requiring training.

Workshop participants were asked about future skill requirements. The results were consistent with those from the member survey, with identification skills, survey methods, legislation/policy, and data management identified as priorities. The drivers for these included changing technology, personal aspiration, changing legislation/policy/Brexit, career progression and employer/client needs.

Further analysis revealed the top five topics under Management and Communications, listed in Table 1 and the graphs below.

**Table 1: Management and communication skills**

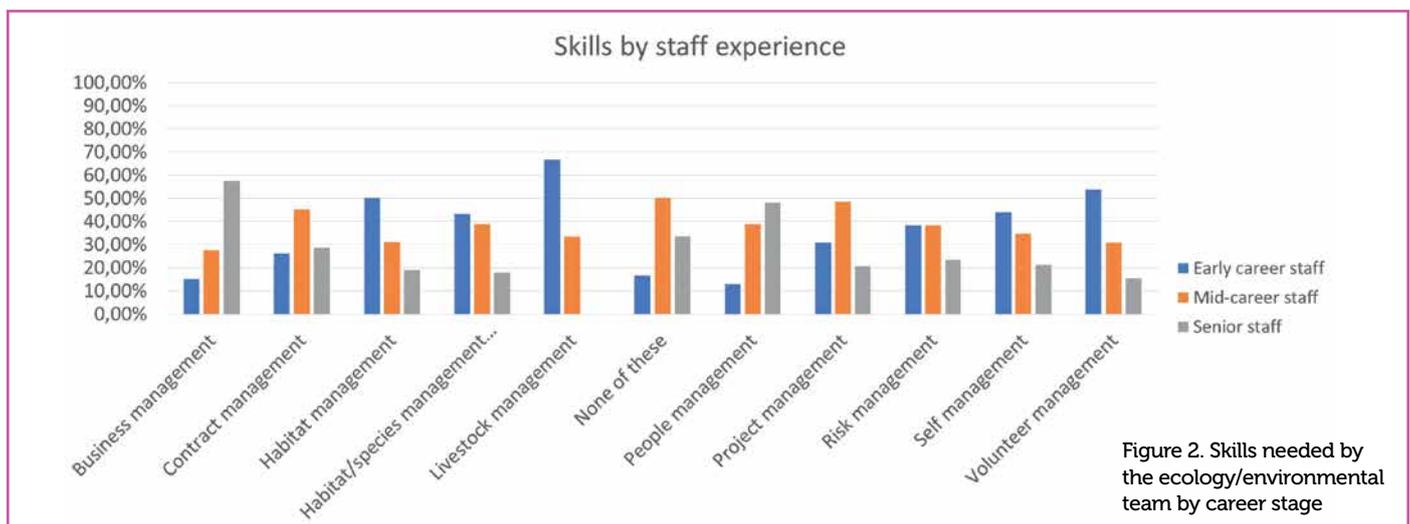
Management		Communication	
Project management	102	Communication	59
Business management	87	Client communication	38
Leadership	78	Giving advice	31
People management	41	Communication/participation	26
Habitat management	31	Negotiation	23



The employer survey, carried out in early 2017, was informed by the previous results and began by establishing company size and sector. Of 44 responses, 18 had more than 500 employees, nine had less than 10. The majority (28) were private sector/consultancies, six were local authorities, six were NGO/voluntary sector and one from a statutory nature conservation body. A list of options enabled training needs to be identified for early, mid-career or senior staff. The management priority for early career staff related to habitats and volunteer

management; while for early/mid-career it was risk and habitat and species management. Training in project, contract and people management was needed for mid-career staff, with senior staff also requiring people management. Business management was exclusively identified for senior staff, with self-management training relevant for all grades.

Presentations were the communication priority for early career staff, with media and client training at early/mid-career levels. Negotiating/influencing, advising,



**Figure 2. Skills needed by the ecology/environmental team by career stage**

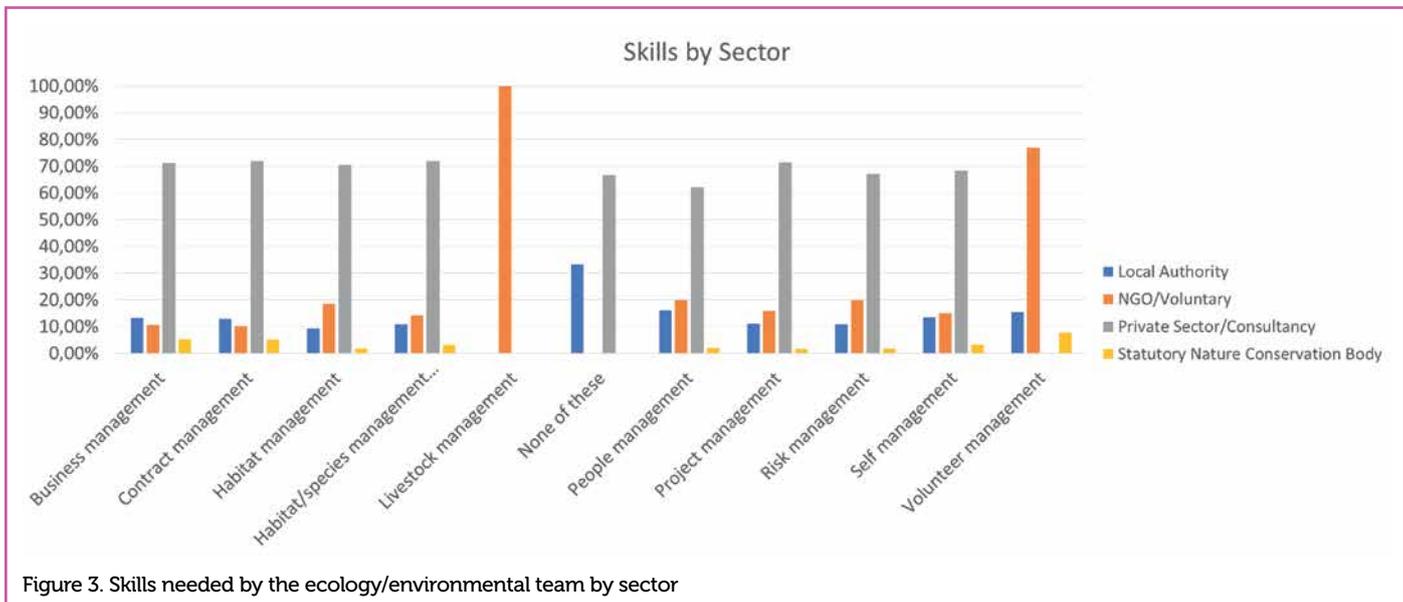


Figure 3. Skills needed by the ecology/environmental team by sector

and stakeholder consultation/participation training was identified at mid-career and senior level, with the latter also requiring campaigning skills. The response to specific training needed for the ecology/environmental team is shown in Figures 2 and 3.

These figures demonstrate the importance of sector and career stage data in providing useful information

Employers were asked about their graduate recruitment process. While 16 reported no issues, top of the consultant's deficit list was poor plant ID, followed by field survey and Phase 1 habitat survey skills, and report writing. Lack of a relevant degree was a surprise as there are 16 CIEEM accredited BSc programmes and a further 5 MSc programmes. Specialist skills included bats, birds, grass ID and marine ecology, perhaps best addressed by targeting recruitment to specific universities. Local authority respondents identified critical thinking, legislation/planning and species survey licences, while NGOs needed better practical habitat/species/project management, and people engagement skills.

### What does this mean for CIEEM?

While these results do not represent a full cross section of the membership they are indicative, and information about future requirements can inform CIEEM's training programme. However, this does not include transferable skills, the most frequently mentioned group. The workshop discussions suggested

that universities could be more explicit in providing basic skills in assignments and research projects, to be developed during career progression.

Clearly employers want junior staff who can 'hit the ground running', equally universities aim to produce graduates equipped for the work place. While much can be done by, for example, bringing in external speakers from industry, setting up advisor groups to inform curriculum development, and making assignments as realistic as possible, universities are constrained by regulations. The CIEEM accreditation scheme should incentivise change towards a more work-orientated ethic but lecturer-student and employer-employee relationships are very different (just think about the cash flow!).

The introduction of the Apprenticeship Levy, requiring larger companies to contribute to a fund that can part-fund apprentices will make significant changes combining on the job training with study on day or block release basis<sup>2</sup>. CIEEM, working with employers and the University of Greenwich, has recently gained approval to develop Apprenticeship Standards<sup>3</sup> for the occupations of Ecologist and Environmental Manager. Once these are completed any registered training provider can work with companies requiring apprenticeships – not only those subject to the levy. This integration between the education and employment sectors is a real opportunity for the profession and should go a long way towards closing the skills gap.

### Notes

1. 2016 Autumn Conference: Skills for the Future: Understanding the impacts of new tools, techniques and approaches. Presentations available at <http://www.cieem.net/2016-autumn-conference->
2. See <https://www.gov.uk/government/publications/apprenticeship-levy-how-it-will-work/apprenticeship-levy-how-it-will-work>
3. See <https://www.gov.uk/government/collections/apprenticeship-standards>

### About the Authors

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