# Membership Employment Survey 2010 

## Part 2: Gender and the Environmental

Sciences
The Institution of Environmental Sciences


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#### Abstract

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## About the Institution

The Institution of Environmental Sciences (IES) is a charitable organisation which promotes and raises public awareness of environmental science by supporting professional scientists and academics working in this crucial arena. The Institution has strong ties with Higher Education and promotes and supports environmental science and sustainable development in universities and colleges both nationally and internationally. Further details can be found at http://www.ies-uk.org.uk

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#### Abstract

In light of the current economic climate, the Institution of Environmental Sciences (IES) is seeking to understand the current employment situation within environmental sciences, including gender differences that may pervade. In August 2010, the IES surveyed a sample of its members; the survey questioned members about their current employment situation, academic history and use of their rights to parental leave. The results of this survey will be published throughout 2011 in a series of reports. This second report focuses on gender differences in environmental sciences and in the IES. In particular the report considers gender differences in employment status, salary and bonuses, position within organisations, qualifications, and the impact of taking parental leave.


## Section 1 - Introduction and Method

Gender equality in the workplace remains a topical issue, as highlighted by International Women's Day on the $8^{\text {th }}$ March 2011 which was centred on the theme of "Equal access to education, training and science and technology: pathway to decent work for women". The Institution of Environmental Sciences (IES) released a press statement in support of this day, signalling its commitment to addressing pervading gender differences within the Institution and the field of environmental sciences as a whole.

Tackling these issues requires a better understanding of the current issues in female employment, salary differences, career progression and parental leave. In August 2010 the IES invited its Fellows, Full and Associate Members to take part in an employment survey, which questioned them regarding their current employment. This is the second in a series of reports outlining the results of this survey. This report specifically addresses current employment differences between men and women, looking in particular at employment status, salaries, sector choices, work hours and the exercise of rights to maternity and paternity leave. In seeking a better understanding of existing gender differences, the IES aims to identify areas where these issues can be addressed within the organisation and the sector as a whole.

The first section of this report outlines the method of surveying the members, followed by the results relating to gender differences in the responses. From these results, conclusions and recommendations are drawn for the consideration by the IES Council and the membership.

## Survey method

A questionnaire was prepared through a survey website (SurveyMonkey.com) where Fellows, Full and Associate members could complete the questionnaire. Affiliate and Student members were not invited to complete the questionnaire as they are generally not currently employed in the field of environmental sciences.

Members were asked their member grade and their chartered status, and were then asked to complete sections depending upon their employment status (employed, unemployed or retired). All respondents were asked about their education, age, gender, and details regarding their use of the right to parental leave.

Employed members were asked to provide details regarding their sector, field within environmental sciences, position within their organisation, salary, benefits and job security. Unemployed members were asked how long they had been seeking work and their confidence levels in finding work. Retired members were questioned about their sector and final salary and pension.

## Section 2 - Results

## Responses

The survey was completed by 423 members. This represents the view of over $40 \%$ of the membership invited to participate. The membership status of those who responded was as follows:

| Member Grade | Percentage of Survey <br> Respondents | Percentage of IES Membership |
| :--- | :--- | :--- |
| Fellows | $3.8 \%$ | $3.0 \%$ |
| Members | $77.3 \%$ | $78.5 \%$ |
| Associates | $18.9 \%$ | $18.5 \%$ |

The survey respondents provide a representative sample of the Institution's membership.

Of the responses received, 111 were female, 286 male, with 26 respondents choosing not to disclose their gender.

| Gender | Percentage of Survey <br> Respondents | Percentage of IES Membership |
| :--- | :--- | :--- |
| Female | $28.0 \%$ | $29.6 \%$ |
| Male | $72.0 \%$ | $70.4 \%$ |

The survey therefore provides a representative sample of the Institution's gender make up.

## Gender and IES membership

Survey respondents were asked to categorise their employment status at the time of answering.


Figure 1: Graph showing the member grade of respondents, divided by gender, at the time of answering the survey (August 2010).

The majority of respondents (both men and women) were Full Members of the Institution. Proportionally a higher number of men than women were Full Members (78.3\% and 72.0\% respectively), while a higher percentage of women than men were Associate Members ( $24.3 \%$ of females and $17.8 \%$ of males). Similar numbers of males and females were Fellows of the IES ( $3.8 \%$ and $3.6 \%$ respectively).

Respondents were also asked whether they held Chartered Environmentalist (CEnv) status at the time of answering the survey (see figure 2). The majority of respondents (both men and women) did not have CEnv status. A higher number of women than men held CEnv status ( $35.1 \%$ compared with $32.2 \%$ ). When looking at the membership the IES this gender difference is more marked, with $42.2 \%$ of women who are eligible for CEnv holding the Chartership compared with $33.1 \%$ of men.

The survey also asked members which age bracket (of five year divisions) they belonged to in August 2010 (see figure 3). The distribution of men across the age ranges was more consistent than that for female respondents. There were proportionately more women in the lower age brackets, with $52.3 \%$ of women under the age 35 compared with $32.2 \%$ of men.


Figure 2: Graph showing the percentage of eligible members, divided by gender, who were Chartered Environmentalist at the time of answering the survey (August 2010). Only Full Members and Fellows are eligible to apply for Chartership.


Figure 3: Graph showing the percentage of respondents in each age bracket, divided by gender, at the time of answering the survey (August 2010).

## Current employment status

Survey respondents were asked to categorise their employment status at the time of answering.


Figure 4: Graph showing the employment status of respondents, divided by gender, at the time of answering the survey (August 2010). Retired members were asked to state whether they remain active in environmental sciences. The percentage of respondents was used to account for the difference between the number of men and women who responded to the survey.

The majority of respondents (both men and women) were employed on full-time permanent contracts. Proportionally a higher number of men than women were employed on a full-time permanent basis ( $78.0 \%$ and $63.0 \%$ respectively), while a higher percentage of women than men were employed on full time fixed term/temporary contracts ( $8.1 \%$ of females and $4.9 \%$ of males).

Looking at other contract types, $17.1 \%$ of females compared with $3.9 \%$ of males, were on part-time contracts (either permanent, or on a fixed term/temporary basis), whilst $8.4 \%$ of men and only $4.5 \%$ of women considered themselves to be self-employed.

There was no gender difference between those respondents who were unemployed (at 1.0\% of respondents), though the percentage of females taking career breaks at the time of answering the survey was higher than their male counterparts ( $3.6 \%$ compared to $1.4 \%$ ). The level of retirement was generally uniform across the genders, with $2.7 \%$ of female respondents, and $2.1 \%$ of male respondents classing themselves as retired. Of these, activity in environmental sciences was higher among women than men ( $100 \%$ of retired women were still active in environmental sciences compared to two thirds of retired men).

## Unemployed members

Six unemployed members answered the questionnaire, though of these two did not complete all sections. A brief summary of the responses of the four who responded to all questions is shown in table 1 below:

| Gender | Grade | Age | Months <br> Unemployed | Confident of <br> job in 6 <br> months? |
| :---: | :---: | :---: | :---: | :---: |
| Female | Associate | $25-29$ | 8 | Confident |
| Male | Associate | $40-44$ | 7 | Confident |
| Male | Associate | Under 25 | 12 | Not confident |
| Male | Member | $50-54$ | 22 | Not confident |

Table 1: Table showing the responses of unemployed members. Number of months refers to the number of months the members had been unemployed for at the time of the survey (August 2010). Members were asked to state how confident they were of finding work within six months of completing the survey.

Unemployed members account for $1.0 \%$ of members who provided their gender. All respondents, regardless of gender, had been looking for work for over 6 months, and none of them stated that they were 'very confident' of finding work within the 6 months following the survey. No discernable gender difference was found from the data collected.

## Retired members

Of the ten retired members to complete the survey nine specified their gender, whose responses are summarised in table 2.

| Gender | Still active in <br> Environmental <br> Sciences? | Final gross basic annual <br> salary on retirement (in <br> Sterling) | Sector |
| :---: | :---: | :---: | :---: |
| Female | No | $£ 14,999$ or under | Academia |
| Female | No | $£ 30,000-£ 34,999$ | Academia |
| Female | Yes | $£ 40,000-£ 44,999$ | Academia |
| Male | No | $£ 14,999$ or under | Industry |
| Male | No | $£ 14,999$ or under | Consultancy |
| Male | Yes | $£ 15,000-£ 19,999$ | Academia |
| Male | Yes | $£ 30,000-£ 34,999$ | Government |
| Male | No | $£ 45,000-£ 49,999$ | Industry |
| Male | No | $£ 65,000-£ 69,999$ | Government |

Table 2: Table showing the responses of retired members. Members were asked to state whether or not they were still active in the field of environmental sciences following their retirement, and to state their final gross basic annual salary on retirement, as well as the sector in which they were employed.

Retired members make up $2.4 \%$ of the total number of survey respondents. The highest final gross basic annual salary on retirement for women was $£ 40,000-£ 44,999$ compared with $£ 65,000-£ 69,999$. Just $66.6 \%$ of male retired members retired on a final gross basic annual salary of $£ 45,000$ or less. Looking at sector differences, all of the women had worked in
academia. The final salary for the male retired member working in academia fell within the range of final salaries for women in the same sector.

## Employment sector

Employed members were asked to categorise the sector they currently work in, choosing between academia, consultancy, government (local and national), industry, nongovernmental organisation (NGO)/charity or specifying an alternative (see Figure 5 below).


Figure 5: Graph showing the percentage of respondents in each employment sector, divided by gender, at the time of answering the survey (August 2010). The percentage of respondents was used to account for the difference between the number of men and women who responded to the survey.

The largest proportion of members worked in the consultancy sector, with $51.3 \%$ of all respondents who stated their gender employed in this area. The percentage of respondents employed in this sector is uniform across the genders (52.3\% of females, $50.9 \%$ of males).

The gender distribution is less equal in other sectors, with $12.1 \%$ of male respondents employed in industry compared to only $3.6 \%$ of females. Higher proportions of the women surveyed however are employed in academia, government and the Third Sector: $8.1 \%$ of females compared to $5.2 \%$ of males work in academia, $24.3 \%$ of women compared to $19.1 \%$ of men work in government while the Third Sector accounts for $2.7 \%$ of female respondents and just $1.7 \%$ of the male responses.

For those respondents who selected "other", the most frequently stated sector was construction, with men representing $80.0 \%$ of the respondents who stated construction as their field.


Figure 6: Graph showing the percentage of female respondents employed in each field within environmental science, compared with percentage of male respondents, at the time of answering the survey (August 2010).

## Field of employment

Employed members were asked to categorise the field they worked in within their sector, the results of which are shown in Figure 6.

The distribution of male and female respondents between the different environmental fields is not consistent. Air quality management is the most represented field, with $20.8 \%$ of respondents who disclosed their gender employed in this discipline. Within the female respondents to the survey, $22.5 \%$ were employed in this field, while $19.1 \%$ of male respondents do likewise. Contaminated land is the second most represented field of employment, with the proportion of female respondents ( $14.4 \%$ ) again exceeding than that of males (13.2\%).

Other fields where proportionally more women were employed than men were: auditing/environmental management, climatology, conservation/ecology, education \& training/research, policy/strategy and transport. The dataset for many of these fields was however relatively small.

The proportion of male respondents exceeded that of females in all of the remaining employment fields. Of these, the most marked differences were in the field of sustainability ( $3.6 \%$ of men compared with $1.4 \%$ of women) and enforcement/monitoring/environmental law ( $6.3 \%$ of men and $3.6 \%$ of women).

## Position within organisation

Survey respondents were asked to categorise their position within their organisation. Their responses were then divided up according to their gender (see Figure 7).


Figure 7: Graph showing the current position of employed members within their organisation, at the time of answering the survey (August 2010). The percentage of female respondents working at each level is compared with the proportion of male respondents. The positions are listed in an approximate representation of the career progression within organisations.

Starting with early career positions within organisations, $6.5 \%$ of female members are working at a graduate/trainee level compared to $2.5 \%$ of males. Similarly, at the specialist/technician stage the proportion of female respondents exceeds the proportion of male respondents ( $18.8 \%$ and $14.1 \%$ respectively). At the level of officer and assistant/junior manager $18.6 \%$ of female members and $14.7 \%$ of male members are employed.

At a project/middle management level the proportions of female and male workers is uniform; 29.9\% of females and 29.2\% of males are employed in these positions.

Men are more likely than women to occupy higher positions in organisations. Whilst the proportion of women working as associates/partners is slightly higher than that of men ( $5.6 \%$ versus $4.3 \%$ respectively), at a senior manager and director level the difference between male and female representation is greater. For example, $20.5 \%$ ( $14.0 \%$ at senior manager level, $6.5 \%$ employed as directors) of women were employed at these two levels in comparison with $35.0 \%$ ( $17.7 \%$ senior manager, $17.3 \%$ director) of men.

## Salary

Respondents were asked to identify within which $£ 5,000$ band their current salary fell. These responses were divided according to gender, the results of which are shown in figure 8.

The median salary band of all employed survey respondents was $£ 30,000-£ 34,999$. There is little difference between male and female respondents in terms of average pay. The median salary band for male respondents was between $£ 30,000$ and $£ 34,999$, whilst equally high numbers of women were earning in this band and between $£ 35,000$ and $£ 39,999$.

The gender difference in salary is seen in the range and distribution of salaries. The bottom end of the pay scale is dominated by bands in which the proportion of women earning at that level is greater than the proportion of men. $10.8 \%$ of female members are earning under $£ 20,000$ compared to just $7.0 \%$ of male members.

A higher proportion of female than male members earn between $£ 45,000$ and $£ 49,999$ (8.1\% and $4.2 \%$ respectively), but above this the number of women earning decreases. $4.9 \%$ of men earn between $£ 50,000$ and $£ 54,999$ annually, compared to just $0.9 \%$ of women. At the top end of the pay scale, no female respondents earned over $£ 75,000$ compared with $5.1 \%$ of male respondents who earned at or above this level.


Figure 8: Graph percentage of female employed respondents earning in each £5,000 salary band, compared with male employed respondents, at the time of answering the survey (August 2010).

## Bonuses

Members were asked to state whether they received a bonus in addition to their regular salary in 2009. The results of this are shown in figure 9 below.


Figure 9: Graph showing the proportions of female and male members who stated that they received a bonus in addition to their salary in the year 2009.

The majority of members did not receive a bonus in addition to their regular salary in 2009. Proportionately more men than women received bonuses ( $40.0 \%$ of men, compared with $34.6 \%$ of women).

Respondents who received a bonus were given the option to state the amount they received, with $37.6 \%$ supplying this information. These amounts were compared with their gross annual salary to determine the percentage of the salary that respondents' bonus represented. The lowest value of the salary band was used for these calculations, for example, for those earning between $£ 15,000$ and $£ 19,999$ the value used was $£ 15,000$. On average, the bonus for women represented $3.8 \%$ of their gross annual salary, compared with $8.4 \%$ for men. The range also varied between men and women. Bonuses for men represented between $0.4 \%$ and $75.0 \%$ of their gross annual salary, compared with a range of $0.4 \%$ to $10.2 \%$ for women.

## Benefits

Respondents were asked to state which of the following benefits they received with their job: Car (allowance or company), Childcare facilities, Direct financial, Health insurance, Other insurance, Pension (contributory), Pension (final salary scheme), Pension (non-contributory), Travel subsidy. They were also given the opportunity to state 'other' benefits that were received or to select 'none'. There was little gender difference in the proportion of respondents offered benefits by their employers, as $89.7 \%$ of all female respondents and $87.0 \%$ of male respondents received at least one additional benefit.

Respondents who were eligible for benefits were asked to specify which benefits their employer offered, with respondents able to select multiple options. These responses were compared for gender differences in the type of benefits being offered.


Figure 10: Graph illustrating proportions of female and male respondents eligible for each benefit type, at the time of answering the survey (August 2010). Respondents were given the option to select more than one benefit.

In both male and female respondents, the majority of male and female respondents eligible for benefits were offered a pension (contributory) by their employer (61.4\% and 65.6\% respectively). The least frequently offered benefit was a direct financial contribution by employers ( $0.8 \%$ for men and $2.1 \%$ for women). A greater proportion of men received a company car from their employer, at $39.0 \%$ compared with $16.7 \%$ of women. Proportionately more male respondents were offered childcare services compared with women ( $5.8 \%$ versus 2.1\%).

## Flexible hours

Survey participants were asked whether their employer offered flexible working hours.


Figure 11: Graph showing the proportions of female and male members whose employers offered flexible working hours, at the time of answering the survey (August 2010).

The proportion of women who stated that their employer offered flexible working hours was slightly higher than the answers for male respondents ( $77.6 \%$ and $73.6 \%$ respectively).

## Contracted hours versus hours worked

Members were asked to state the average number of hours per week that they were contracted to work. They were also asked to state the average number of hours per week that they actually worked. These answers were compared to determine whether respondents were working more or less hours than they are contracted to work

Figure 12 illustrates the proportions of female and male respondents who work fewer hours than they are contracted to work, those that work the hours contracted and those that work more than required according to their contract. In total, $75.3 \%$ of all employed members were working more hours than they are contracted to. Looking at the gender distribution, $67.3 \%$ of women and $78.3 \%$ of men were working a greater number of hours than their contracts require them to work. Only $31.8 \%$ of women and $20.2 \%$ of men were working the number of hours they are contracted to, while $0.9 \%$ and $1.4 \%$ respectively of female and male employees were working fewer hours than they are contracted to work.

The average number of extra hours employees were working for their employer is between one and five hours for both men and women ( $38.6 \%$ and $43.0 \%$ respectively). Considering the range of responses provided, men were found to be working between 55 hours less and 50 hours more than the hours they are contracted to work. Women were working between 28 hours less and 30 hours more than they were employed to work. $9.0 \%$ of men were working more than 15 hours of overtime each week, compared with only $3.7 \%$ of women.


Figure 12: Graph illustrating the proportions of female and male respondents who work, on average, hours less than, equal to, or more than they are contracted to work, at the time of answering the survey (August 2010).

## Job security

Members were asked how they viewed their job security in 2010 compared with 2009, the results of which are summarised in figure 13 below. A higher proportion of females (54.2\%) than males ( $41.1 \%$ ) felt that their job had become less secure in 2010 than it was in 2009, while proportionally more male members felt that their job was either equally secure ( $43.3 \%$ ), or more secure ( $15.5 \%$ ) than female members ( $40.2 \%$ and $5.6 \%$ respectively).

To ensure that these results were not masking differences in job security between the different sectors, the results were divided between the different sectors. Within government and the Third Sector, a perception of increased job insecurity was consistently high for both men and women. In academia, women were more likely to perceive their jobs were less secure in 2010 than 2009 than men ( $66.7 \%$ compared with $40.0 \%$ felt their job was more insecure than in the previous year). A similar pattern is seen in consultancy, with $55.2 \%$ of females perceiving greater job insecurity, whilst only $32.2 \%$ of men stated that their jobs were less secure. In contrast with this, in industry no women felt their job was less secure, compared with the $37.1 \%$ of men who perceived that their jobs were less secure.


Figure 13: Six graphs demonstrating respondents' perceptions of their job security in 2010 compared with 2009, divded by gender (at the time of answering the survey (August 2010)). Respondents were asked to state whether their job was less, equally or more secure than in the previous year. The first graph shows the total responses divided by gender. The other five graphs demonstrate the perceptions of male and female respondents of job secuirty in the different sectors: academia, consultancy, government, industry and NGO/charity. Those respondents who selected "other" as their job sector are included in the first graph only.

## Highest qualification

Participants were asked to select their highest level of qualification from the following list: Higher National Certificate, Higher National Diploma, Foundation Degree, Postgraduate Certificate, Postgraduate Diploma, Bachelors, Masters and Doctorate, or to specify an alternative.


Figure 14: Graph illustrating the proportion of male and female respondents at each of the stated qualification levels, at the time of answering the survey (August 2010).
$15.3 \%$ of women compared to $17.1 \%$ of men stated that their highest level of qualification was a Doctorate, while $54.1 \%$ of women and $43.7 \%$ of men had a Masters. $22.5 \%$ of female respondents stated a Bachelors degree was their highest qualification compared to $26.2 \%$ of male respondents.
$7.2 \%$ of female respondents had a Postgraduate Diploma or Certificate while $8 \%$ of men stated this was their highest qualification level. At the bottom end of the qualifications scale, $2.4 \%$ of the male participants had a Higher National Certificate or Diploma or a Foundation Degree, whereas none of the women surveyed held this as their highest qualification.

## Parental leave

Survey respondents were asked whether they had ever taken parental leave, and if so the length of the leave that they took. At the time of writing (March 2011) female employees in the UK who have worked for their employers for at least 26 weeks are entitled to 26 weeks Ordinary Maternity Leave plus 26 weeks Additional Maternity Leave if they so desire. Of these 52 weeks, they should be paid Statutory Maternity Pay for 39 weeks. Male employees in the UK who have worked for their employers for at least 26 weeks are entitled to two weeks paid Ordinary Paternity Leave.


Figure 15: Graph illustrating the proportions of female and male members who have taken paid maternity or paternity leave, at the time of answering the survey (August 2010).
29.7\% of female respondents stated that they had taken paid or unpaid maternity leave compared to $23.4 \%$ of males who had taken paid or unpaid paternity leave at some point during their careers.

Those respondents that had taken paid or unpaid maternity or paternity leave were asked to state how long they had taken leave for, the results of which are shown in figure 18. The most frequent length of paid maternity leave for women was between 25 and 28 weeks, which dropped to $9-12$ weeks for unpaid maternity leave. Paternity leave followed a similar pattern, with the most frequently selected time period being paid leave being 6-10 days, compared with 1-5 days for unpaid leave.

Respondents were also asked whether they had returned to the same position in their organisation after taking parental leave. All male respondents who had taken leave returned to the same position. In contrast however, $36.4 \%$ of women did not return to the same position at work. Of the women who did not return to the same position $16.7 \%$ were made redundant due to taking maternity leave whilst $75.0 \%$ of the women returned on a part-time basis.

Respondents were also asked whether their employers supported their decision to take parental leave. Only $1.6 \%$ of men felt their employer was not supportive compared with $6.5 \%$ of women.





Figure 16: Graphs illustrating the periods of paid and unpaid maternity and paternity leave taken by female and male respondents, at the time of answering the survey (August 2010). Note that different timescales are used for maternity and paternity leave, reflecting the time periods of maternity and paternity under UK law at the time of writing (March 2010).

## Section 3 - Conclusions and Recommendations

The 2010 IES Member Employment Survey was aimed to develop a better understanding of pervading gender differences within the membership of the Institution, and the field of environmental sciences as a whole. Most of the issues raised by the survey are beyond the field of control of the IES, but as a professional body it is the Institution's responsibility to highlight trends within the sector. This is an attempt to provoke self-reflection on pervading gender differences within the environmental sciences profession.

Looking first at the demographic of the membership of the IES, the survey reflects the current membership, with the number of men outnumbering the female members. This difference is seen at the level of Associates and Full Members, with gender representation being similar at the grade of Fellows. As Full Members have greater experience working in the environmental sciences than Associates, this difference is indicative of women having less experience in the field than men. This difference may be related to the fact that women make up a higher proportion of members under the age of 35 .

Women are more likely to utilise the opportunity to become CEnvs than men. This is consistent with the position of the IES as a leading organisation in helping women to become CEnvs compared with other organisations ${ }^{1}$. Monitoring the uptake of CEnv and also the Chartered Scientist by both men and women will allow the IES to ensure that it continues to maintain this position as one of the premier organisations helping both men and women to achieve Chartered status.

Whilst the majority of both men and women are in full-time employment, women are more likely than men to work part-time or to be on a career break. The survey did not provide any indication whether this was out of choice. When considering parental leave choices however, more women than men were exercising their right to parental leave, and this was for much longer periods of time than paternity leave. Similarly, on returning to work after taking leave, all men returned to the same position whilst $75.0 \%$ of the women returned on a part-time basis. Whilst it is difficult to draw any firm conclusions, this anecdotal evidence suggests that more women than men were on career breaks or working part-time due to family choices.

The survey did not indicate any gender difference between unemployed rates, and between the length of unemployment or confidence in finding a job. As there were very few unemployed members of the IES however it is difficult to draw strong conclusions from this. Regarding self-employment however, men are more likely than women to be self-employed. Further research is required to determine whether this is because women they do not feel they are in a position to do so or are less likely to desire self-employment.

[^0]The sectors of work within the environmental sciences are not equally represented by men and women. Proportionately more women than men are employed in academia, government (local and national) and the Third Sector, whereas industry is more male dominated. The IES has committed to creating a positive image of women working across the environmental sciences already. The IES has undertaken 14 interviews with environmental professionals as part of its work promoting environmental careers, with eight of the interviewees being women ${ }^{2}$. The aim of these videos is to demonstrate the breadth of environmental careers, whilst seeking not to reinforce gender stereotypes by featuring men and women working across the sectors. The IES also uses publications such as the December 2010 issue of the Environmental Scientist journal, which addressed environmental justice including gender inequalities, to highlight pervading issues in the sector. The EnviroSci e-newsletter features member profiles each month, which the IES is using to celebrate the career successes of both men and women in the field. A considered approach to future publications should be taken to ensure that unintended stereotyping does not materialise and to ensure a gender balance is portrayed.

In a similar vein, gender representation in each of the environmental fields was not equal, with traditionally "feminine" subjects such as conservation and ecology having proportionately more women. There was however little data for some fields within the environmental sciences, and so it is difficult to draw strong conclusions from this. The uneven distribution of men and women between the fields reinforces the need for strategic work to address persistent gender categorisation of fields and sectors within environmental sciences.

Gender inequality is often thought to pervade in organisation regarding salary and progression along the career ladder. Whilst little gender difference was recognised in employment at a middle management level, the survey indicates that there are still differences seen at early and late career stages. There are proportionately more women employed lower on the career ladder, whereas men dominate the top-end jobs. This difference reinforces the notion of the "leaky pipeline", with the lack of consistency in female representation throughout career stages. This is reflected by the fact that within the IES nearly half of Student Members are female, whereas less than a third are Full Members ${ }^{3}$.

This "leaky pipeline" can also be seen through gender differences in the recognition of achievements. The IES awards the John Rose Award to honour and publicise a piece of outstanding post-graduate environmental science research, which has been won by a woman for the last three years. In contrast with this, the 11 people have been awarded Honorary Fellowship of the IES in recognition of their significant contribution to environmental sciences, of which none are women. To address the lack of recognition of women so far, the IES is committed to celebrating the role of women in environmental sciences through appointing Honorary Fellowships to suitable female pioneers.

[^1]There are a number of caveats to the conclusions drawn from gender differences along the career ladder. Proportionately more men are self-employed and therefore would hold the title of "Director". Also, as there are proportionately more women at younger ages in the IES, it is perhaps unsurprising that there are more women holding early career positions in organisations. Repeated surveying is required to determine whether this distribution of career positions alters with the age demographic or remains consistent.

There was no discernable gender difference regarding average salary, which is consistent with the high level of employment of both men and women in middle management. A difference is seen however in the range of salaries. With no women earning over $£ 75,000$ compared with the $5.1 \%$ of men who earned at or above this salary. This salary difference is consistent with the lack of female representation in the top positions in organisations.

Men are also more likely to receive a bonus for their work, and more likely receive a bonus which represents a higher proportion of their annual salary. This is indicative of a propensity for men to receive greater financial benefit for their work than women. When considering the final salary of retired members, male members were likely to be receiving a higher salary at the end of the career than women, though there were only nine retired responses provided.

Women were more likely to be working in jobs where employers offered flexible working hours. Coupled with the fact that proportionately more women worked part-time, this suggests that a greater number of women will have a more varied or flexible working week. There was little difference between men and women for receiving benefits from their employers, with almost all the benefits being relatively evenly represented by men and women.

Respondents were asked to about the number of hours they worked compared with the hours required in their contract. Men were likely to work fewer hours than they were contracted to work each week. There were however very few respondents who worked less hours, so it is difficult to draw conclusions from this. Men were also however more likely to work overtime than women, and the number of hours overtime worked tends to be greater for men than women. This is likely to reflect that men have more opportunity to choose to commit a greater number of hours to their employer.

The survey suggests that women generally perceive less job security than men, but when this difference was broken down by sector, the answers were seen to reflect the increased job security in the private sector compared with the public sector (see part 1 of the Member Employment Survey 2010). The difference in job security was therefore less likely to be related to gender differences.

When considering whether there is a gender difference between qualification levels, women were more likely to hold a Masters as their highest qualification. Men were more likely to be either more qualified (with a Doctorate) or less (with a BSc, Postgraduate Diploma/Certificate or a Foundation course). The numbers of members only holding a Foundation qualification were low, which is reflective of the fact that these qualifications are usually undertaken as a
basis to further academic study. One of the primary aims of the IES is to promote and support environmental sciences education. These results suggest that the field of environmental sciences tends to be strong academically. The IES should continue to work to support both men and women throughout their academic studies, through accreditation of courses and promoting awards such as the John Rose award.

Parental leave remains a contentious issue, particularly with regards to the career implications for women. Women were more likely to have taken parental leave, and unsurprisingly both men and women tend to take less unpaid leave than paid leave. It is worth nothing that rights to paid maternity and paternity leave change frequently over time and vary between nations, and so it is difficult to draw conclusions from the amount of leave taken by members.

Whilst the position of men within their organisation was consistently unaffected by the use of paternity leave, over a third of women who took leave did not return to the same position. The majority of these returned part-time, which may contribute to the high proportion of women working part-time, but $16.7 \%$ of these women were made redundant for taking maternity leave. This is indicative of pervading difficulties for women in choosing to maintain a career whilst also having a family. Childcare was the second least frequently offered benefit to both men and women; this is a feature of concern for organisations within environmental sciences. Women were also more likely to feel their employer was unsupportive of their choice to utilise their right to maternity leave. In highlighting these issues, the IES aims to support members through all stages of their career, as demonstrated by the different membership packages for members who are retired, unemployed or taken parental leave.

There are limitations to the conclusions which can be drawn from 2010 IES Employment Survey. The results are weighted by the number of responses from each sector. Caution is therefore required when considering salary bands and representation of fields by sector. Some of the datasets are very small, for example the number of unemployed members. This makes it difficult to identify trends within the data. It is hoped that repeating the survey every few years will enable the IES to draw more meaningful conclusions on trends in the sector.

These brief conclusions are the interpretation of the authors, but this report is intended as a discussion paper provoking dialogue amongst the membership and the IES Council. Comments should be addressed to Julia Heaton at the IES Project Office (enquiries@iesuk.org.uk). The previous part of the report discussing current employment in environmental science is available for IES members on the IES website. A subsequent part of the survey report will examine the impact of qualification choices on careers.


[^0]:    ${ }^{1}$ Roberts, C. (2010) Environmental Justice: Inequality and Gender. Environmental Scientist 19(3): 2-4.

[^1]:    ${ }^{2}$ These interviews are available to watch on the YouTube channel: www.youtube.com/user/work2savetheworld
    ${ }^{3}$ Roberts, C. (2010) Environmental Justice: Inequality and Gender. Environmental Scientist 19(3): 2-4.

