Examination Period 3: 2016/17

Module Title: Ecological Survey and Consultancy
Level: Six
Time Allowed: Three hours

Instructions to students:

- Enter your student number not your name on all answer books.
- Answer all questions.
- Questions are not equally weighted. Where a question has more than one part the division of marks is stated.
- Begin each answer on a new page; label each page clearly with the number of the question you are answering.
- This is a seen paper. Questions and Case Study have been distributed to candidates two weeks prior to the examination.
- Case Study: FPCR (2016) Ecological Appraisal of land south of Boughton Road, Moulton, Northants.
- Neither books nor notes may be taken into the examination.

<table>
<thead>
<tr>
<th>No. of Pages</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Questions</td>
<td>3</td>
</tr>
</tbody>
</table>
Answer all questions.

1. In their discursive paper, Germano et al. (2015) stated ‘Mitigation-driven translocations all too often fail to follow accepted scientific best practices and are poorly documented, providing few opportunities to apply lessons learned and to improve the conservation efficacy of similar projects in the future’.

   Critically appraise this statement by reviewing and outlining the apparent evidence base for ecological mitigation and translocation for a range of species occupying terrestrial and/or aquatic systems.

   (40 marks)

2. You are a Local Authority ecologist working in a County Council Planning Department. You have received a planning application for the development of seventy five new houses on an area of intensively farmed arable land with the following noteworthy features:

   - A tributary stream to a wetland SPA where both the SPA and the stream are known to support populations of Arvicola amphibius;
   - Directly adjoining ASNW with species-rich boundary hedgerows and pre-1990 biological records of Muscardinus avellanarius;
   - Centrally located in one of the arable fields is a group of three veteran trees for which there is no survey data, but the appearance of the trees is consistent with roosting habitat for bats.

   The Chief Planning Officer believes the principle of development on the site is acceptable but she is concerned about protecting the biodiversity assets. Critically evaluate her view by reviewing the key ecological impacts using a knowledge of species autecology, wildlife planning, EcIA protocols and EPS licensing. Moreover, what are the stages and timings of managing this project and what is the outcome that could facilitate the development to proceed whilst conserving and enhancing the biodiversity value of the site?

   (30 marks)
3. FPCR Environment and Design Ltd recently undertook an ecological appraisal on behalf of Hallam Land Management Ltd to advise on a development of approximately 150 dwelling units plus the provision of sports pitches and a community car park on land located south of Boughton Road, Moulton, Northamptonshire. On behalf of the client, critically evaluate the survey methodology and conclusions outlined in this report allowing you to conclude if the key findings conform with expectations from the revised Guidelines for Ecological Impact Assessment (2016)\(^1\)?

(30 marks)

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