***­­­environmental SCIENTIST* journal: Learning Resource Notes**

The purpose of these educational resource notes is to provide a format for informal, seminar-style discussions of the topics explored in the latest edition of the journal of the Institution of Environmental Sciences.

Through discussion of the ideas and issues presented within the journal, they aim to supplement and enhance students’ knowledge and understanding of a broad range of environmental science issues and provide insights into the professional concerns of practising environmental scientists.

**Articles in focus**

The below articles have been selected as particularly relevant for in-depth discussion, allowing for wider debate of the key elements of the article topic. Some specific questions you may wish to consider when reading and discussing these articles are outlined.

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| Learning outcomes | * Understand the main concepts and challenges discussed in the edition
* Describe the conclusions reached by authors, and identify their relevance to the environmental science sector
* Critically reflect on the ideas presented
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| Format | * Articles of particular interest are to be selected and shared with the group to read ahead of the discussion. Suggestions of focus articles are described below.
* Small group discussions of articles that closely relate to programme content to supplement learning.
* Discussions can be led by participants or the tutor, using the ‘articles in focus’ resource to prompt debate and aid the conversation.
* The suggested discussion points and questions provided in this pack for selected articles can be used as a starting point to guide the discussion.
* Students can be encouraged to choose to discuss any of the other articles within the issue.
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e*nvironmental SCIENTIST* **Britain’s Natural capital**Vol 33, issue 1

<https://www.the-ies.org/resources/britains-natural-capital>

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| **Topic overview**  | Britain’s natural environment is often viewed as something that exists independently of our financial and governance systems. Whilst there are questions about whether we should reduce nature to a quantifiable entity, it may no longer be enough to advocate for our natural environment purely for its own sake. To legislate for the protection, funding, and political support of nature in Britain, we must offer robust evidence of the benefits – social, financial, and ecological – that a healthy natural environment imparts.In this issue, authors explore some of Britain's most important ecosystems, as well as presenting expert perspectives on some of the ways we can use the concept of natural capital to the advantage of both society and the environment. Alongside responding to some of the biggest challenges facing our environment today, contributors to this edition of the journal offer persuasive and evidence-led assessments on the state of Britain’s natural capital. |
| **Articles in focus** |
| **Reporting on the state of England’s natural capital****Tricia Rice & Jane Lusardi (p. 10)** | **Article overview:** This article reflects on how we gather and structure evidence to support the economic concept of natural capital, and how it can be used to benefit society and the environment.  |
| * Identify three benefits that increased biodiversity has for human society.
* What kind of data gaps exist in relation to calculating natural capital, and how are these gaps being addressed by Natural England?
* The authors highlight that there are significant challenges in transitioning from collecting and presenting natural capital data, to making it part of policy and decision making. Assess one of these challenges and discuss how it may be overcome.
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| **The importance of urban natural capital in Britain****Alison Holt (p. 44)** | **Article overview:** In this article, the author presents a case study of Greater London’s natural capital, to illustrate the importance of safeguarding and improving natural capital in Britain’s urban spaces. |
| * Identify some environmental issues that are exacerbated by city infrastructure.
* Discuss the range of environmental and social benefits that Greater London’s woodland offers, and identify why these are particularly important in an urban context.
* Explore the ways that the monetary value of the sites discussed in the case study have been calculated. How should the financial calculations be used, and what are their potential pitfalls?
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| **(Re)turning the tide: changing perceptions on the value of saltmarshes****Tom Brook (p. 90)** | **Article overview:** This article explores how saltmarshes have been overlooked in terms of their role in ecosystem services and natural capital approaches, and addresses why they are an important factor to be considered in natural capital evaluations and calculations. |
| * How has the environmental degradation of saltmarshes been justified in the past?
* Compare the different social and environmental benefits that saltmarshes provide. Which of these do you think is most important in the context of natural capital?
* The author identifies competing demands for land use as a barrier to successful saltmarsh restoration. Analyse the reasons this might occur, and what could be done to mitigate conflict over land use.
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