Summer Examinations 2015

ENV301415N
SEEN PAPER

Module Title Landscape and Restoration Ecology
Level Six
Time Allowed One hour and thirty minutes

Instructions to students:
• Enter your student number not your name on all answer books.
• Answer all questions.
• This is a seen paper. Questions have been distributed to students two weeks prior to the examination.
• Begin each question in a separate answer book; label each answer book clearly with the number of the question you are answering.
• Neither books nor notes may be taken into the examination
• Please enter your student number on the diagram provided and submit this together with your answer book(s).

No. of Pages 2
No. of Questions 3
Answer all questions.

You are provided with information about a hypothetical piece of calcareous grassland located in a limestone quarry in north Northamptonshire which has recently been acquired by the county Wildlife Trust. The Wildlife Trust aims to enhance the biodiversity of the site through active management.

Using the information provided, answer the following questions:

Question 1

The diagram shows a summary of a palynological investigation undertaken on a wetland site on the limestone 20 km away. Interpret the diagram by indicating the main vegetation zones on the diagram. Describe the zonation in your Answer Book and the possible reasons that might account for these changes. Provide common names for any species you refer to.

(50 marks)

Question 2

Without reference to any types of specific proposals for management (see Question 3) explain the implications of the diagram for the management of the site.

(15 marks)

Question 3

Suggest some potential appropriate measures that could be taken to enhance the biodiversity in this quarry site. For any measure you propose, explain the extent to which the terms 'creation', 'restoration' or 'conservation' are applicable.

(35 marks)

The site is 10ha in size and the last workable limestone was quarried out just after World War II. The vegetation is now dominated by Brachypodium pinnatum (20% of the area), Crataegus monogyna and Prunus spinosa scrub (60%), and Fraxinus excelsior/Acer pseudoplatanus woodland (20%). The flora is limited although there are a few individuals of characteristic plants such as Daucus carota, Asperula cynanchica, Anacamptis pyramidalis, and Orobanche elatior. There is vehicular access with car parking for 3 or 4 cars.

End of Paper