

## ENVIRONMENTAL AND LAND-BASED STUDIES

### Unit 5: Plants and animals: their role in society



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## Environmental and Land-based Studies

### Level 2 Unit 5: Plants and animals: their role in society

#### Sample scheme of work

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This is an example of a scheme of work. You can adjust it or extract content to create a scheme of work to suit your delivery needs. It can also be adjusted by adding theory workshops to support learners who have/need additional learning time.

This unit is assessed through a centre set and marked assignment, which will be externally moderated.

<b>Total GLH</b>	60
<b>Delivery model</b>	Based on teaching three-hour sessions.
<b>Aim</b>	Learners will develop an understanding of the responsibilities upon ELB industries to use plant and animal resources in a sustainable, economic and moral manner.
<b>Notes</b>	<p>This unit is internally assessed.</p> <p>Two audits of land usage are needed, to allow learners the opportunity to achieve all assessment criteria.</p>

Topic	Activities, assignments, assessments	LO and AC	PLTS	FS	GLH	Resources and other comments
<b>1</b> Social value of plants and animals to society	<p>Consider what contributes to the social value of plants and animals – why we keep them. Start the session with learners brainstorming in small groups. Then as a class discuss the social value of the products gained from animals and plants in relation to medical testing, food, companions, help animals, tourism, recreation.</p> <p>Share examples of materials obtained from plants and animals. Ask learners to contribute too.</p>	AC1a, b, d AC2a	TW1, 2 CT1, 3	SL1 W1	3	Resources required: SMART Board, pictures or clips of how plants and animals relate to society's daily lives.
<b>2</b> Economic value of plants and animals to society	<p>List a range of products that come from plants and animals within the UK.</p> <p>Consider the end purpose of the products and the economic value as they move through their life cycle to the end purpose.</p> <p>Share and discuss scenarios such as peat in Ireland, rice in Asia and forest clearance for cattle grazing in South America.</p>	AC1a–c	CT1, 2	SL1	3	Resources required: box with sample material that derives from plants and animals to use as discussion points.
<b>3</b> Ethical decisions	<p>Discuss the term 'ethics'.</p> <p>Ask learners to think of ethical decisions they make for themselves and those that may have been made for them when they were younger (eg wearing make-up tested on animals or not, eating battery or free range eggs).</p> <p>Using a range of scenarios, ask learners to debate the ethical decisions to be made. Learners should express their own individual views. Tutor to ensure both sides are fairly represented.</p>	AC2b	EP6 IE1, 3	SL1–3	3	Resources required: scenario cards with discussion points linked to plant and animal use.

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<b>4</b> Cultural views/issues that affect the perceived value of animals and plants in society	<p>Ask learners to research into given cultures and religions and create a presentation of beliefs/views they have on plants and animals. Ensure you sign off each topic.</p> <p>Each group will then produce notes and present their research to the rest of the class.</p>	AC2b	TW1 IE1 CT1, 2	SL1–3 R1, 4 Use ICT 1.1–1.4	3	Resources required: if possible, arrange for guest speakers to represent the religious beliefs and cultural backgrounds of the local community.
<b>5</b> Human impact	<p>Discuss the impact of humans on the natural environment – past, present and future. Discuss farming techniques, the change through history from communal farming to industrial farming and on to the encouragement of self-sufficiency and land share programmes.</p> <p>Working in groups, ask learners to conduct a survey of the usage of local allotments, eg how many are available compared to how many are being used. Ask learners to then compare the human impact of allotments to the human impact of a golf course.</p>	AC2a, b AC3b, c	CT2, 3 IE1, 2	SL1 W1, 4–6	3	Resources required: information on allotments, golf courses and usage details.
<b>6</b> Assessment	<p>Explain the roles and purpose of plants and animals, including their social and economic value within your county.</p> <p>Using case studies (wildlife and conservation management, growers and breeders) explain the business, cultural and ethical responsibilities.</p> <p>Describe fully the need for humane production of plants and animals for food.</p>	AC1a–d AC2c	IE3 SM2, 3	Use ICT 1.1–1.3	3	Resources required: information on the enterprises within the county will need to be available for this task.

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<b>7</b> Value of a wildlife trust centre	<p>Arrange for a talk by an environmental organisation related to the chosen habitat (such as a wildlife trust with a café/shop/range of activities that can be offered to the public and a range of habitats).</p> <p>Ask learners to produce a report on the social and economic value of the centre.</p>	AC1a–d AC2c	IE1	SL1 W2, 4–6	3	
<b>8</b> Visit to an educational centre	<p>Arrange a visit to an educational centre, such as Laverstock Park, to focus on bio-diverse farming and the importance of economics in relation to farm enterprises.</p> <p>Ask learners to produce a report of their visit.</p>	AC1c, d AC2b, c	CT2	SL1 W2, 4	3	Resources required: transport, cameras.
<b>9</b> Aquatic environments	<p>Arrange a visit to look at a managed aquatic environment, such as Hatfield Forest.</p>	AC1c, d AC2a, b AC3a	CT1, 2	SL1	3	Give the tour guide clear guidance on the subject matter to be covered to ensure all the relevant learning outcomes are covered.
<b>10</b> Preparing animals for food	<p>Discuss the life cycle of animals and the stage at which they are considered food for humans. Discuss how suppliers maximise their economic value and the end product.</p> <p>Discuss how we ensure meat is fit for human consumption.</p>	AC2c	CT1, 2	SL1 W1	3	Resources required: if possible, arrange a tour of a farm to support this session (the farm tour should not be a piggery as this was visited in Unit 4).

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<b>11</b> Visit to an abattoir	<p>Arrange a visit to an abattoir to look at the methods used to reduce stress. Discuss any trouble the abattoir may have had from animal rights protesters and economic factors that may affect the abattoir.</p> <p>Learners should consider how health, safety and welfare standards for animals and staff are maintained.</p>	AC2c	CT1, 2 SM3	SL1	3	Give the tour guide clear guidance on the subject matter to be covered to ensure all the relevant learning outcomes are covered.
<b>12</b> Visit to a co-operative, arable farm	<p>Arrange a visit to a co-operative farm to view the procedures in place that ensure food is fit for purpose.</p> <p>Learners should consider how health, safety and welfare standards for animals and staff are maintained.</p>	AC2c	CT1, 2 SM3	SL1	3	Give the tour guide clear guidance on the subject matter to be covered to ensure all the relevant learning outcomes are covered.
<b>13</b> Methods to minimise environmental impact	<p>Drawing on the enterprises visited, ask learners to highlight the various problems with waste production and discuss methods of minimising its impact upon the environment.</p> <p>Learners are to choose two sites and draw a table to indicate the:</p> <ul style="list-style-type: none"> <li>• use of resources</li> <li>• management in place to minimise use of resources</li> <li>• suggested improvements in use of resources (energy, water, buildings and machinery)</li> <li>• disposal of waste.</li> </ul>	AC2b, c	CT1, 2 EP2 IE3 SM2	Use ICT 1.1–1.5, 3.1, 3.2 W2, 4–6	3	<p>Resources required: computer notes on resources use from previous visits.</p> <p>Links to Unit 7: Monitoring the environment, and Unit 8: Sources and uses of energy.</p>

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<b>14</b> Introduction to habitats and classification environments	<p>Discuss the term 'audit'. Outline the methodology and consideration you would need to take to complete an audit of an environment.</p> <p>Working in groups, learners need to perform and then evaluate a mini-audit of a recreational area.</p>	AC2a AC3a, c	CT2 IE1, 2, 4, 5	SL1 W2, 4–6	3	Resources required: a large scale map of the recreational area, <i>Nature Detectives Handbook</i> by Raymond Mears and Barbara Taylor, <i>RSPB Pocket Birds</i> and digital cameras.
<b>15</b> Assignment	<p>Ask learners to audit a local area of land, either a country park or a recreational area.</p> <p>One audit should be chosen for completion of the full assignments.</p>	AC3a	CT1–3 IE2, 3 SM2–5	F/S ICT 2.1 SL1	3	Resources required: where possible, support by professionals to aid learners in gathering further information is beneficial.
<b>16</b> Assignment	<p>Ask learners to audit an enterprise involved with food production.</p> <p>One audit should be chosen for completion of the full assignments.</p>	AC3a	CT1–3 IE2, 3 SM2–5	F/S ICT 2.1 SL1	3	Resources required: where possible, support by professionals to aid learners in gathering further information is beneficial.
<b>17</b> Visit to an area of food production	<p>Arrange a visit to an area of food production with some form of recreational land next door, eg playing fields, country park or heath land.</p> <p>Ask learners to compare the difference in management of the land that is managed for recreational purposes and that for production purposes. Learners should consider the social implications of these two areas.</p>	AC1c, d AC2a, b AC3c	CT1, 2 EP2 IE3, 5, 6 SM2	Use ICT 1.1–1.5, 3.1, 3.2 W2, 4–6	3	Resources required: transport, camera, clip board.

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18 Assignment	<p>Learners need to evaluate the audit they would like to present for assessment. The audit should include:</p> <ul style="list-style-type: none"> <li>• an explanation of the enterprise's business, cultural and ethical responsibilities in relation to plants and animals</li> <li>• an evaluation of the social and economic impact, the role of plants and animals in the environment and the enterprise's cultural and ethical responsibilities.</li> </ul>	AC3	CT1, 2 EP2 IE3, 5, 6 SM2	Use ICT 1.1-1.5, 3.1, 3.2 W2, 4-6	3	Resources required: computers, audit results.
19 Assignment	Ask learners to plan a five-minute presentation that makes recommendations for future use of their chosen landscape.	AC1d AC2a, c AC3b, c	IE4–6 SM2, 3	Use ICT 1.1–1.5, 3.1, 3.2 DPC ICT 1.1, 1.2, 3.2	3	Resources required: computers or alternative materials to support verbal presentations.
20 Presentation	Learners will now present their final reports. Invite management from the two areas that have been audited to hear learners' recommendations.	AC1d AC2a, c AC3b, c	SM6	SL1–3	3	Resources required: computers or alternative materials to support verbal presentations.