BASIS CERTIFICATE IN SUSTAINABLE LAND MANAGEMENT

SYLLABUS

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CERTIFICATE IN SUSTAINABLE LAND MANAGEMENT SYLLABUS

LEVEL 5, 15 CREDITS

GENERAL INFORMATION

MOUDULE OUTLINE

INTRODUCTION

Effective environmental land management alongside sustainable farming practices is key to future UK agricultural policy and its importance is recognised across all areas of food production and land management. Improving on-farm biodiversity, managing our natural resources, and community engagement are all vital as the industry moves towards a more sustainable future.

The Certificate in Sustainable Land Management provides a practical insight into the key legislation, principles, application of measures and understanding of on-farm and landscape scale opportunities for advisers and land managers, to carry out effective environmental land management. The knowledge acquired through the completion of this course will help to underpin the delivery of agri-environment scheme applications and ongoing management to achieve the desired outcomes.

This course is designed to outline how to achieve the successful delivery of sustainable farm management practices coupled with the management of the natural environment, for both conservation and commercial use. It covers a wide variety of topics including, but not limited to, policy and legislation, habitat management for wildlife, integrated pest management, soil health and water quality, farm business economics, mapping and layering up initiatives for the benefit of the farm business and connections across the landscape.

The course has been designed for professionals involved in providing environmental advice to farms and the farmed environment, along with farmers and land managers in the UK.

Successful completion of the Certificate in Sustainable Land Management course provides the required qualification to entry for joining the BASIS Environmental Advisers Register.
This course has been designed to complement existing BASIS courses. To further develop your technical and practical knowledge in a specialist area, on successful completion of this course, the following training courses are recommended:

- Agronomy and integrated pest management – Certificate in Crop Protection IPM
- Nutrient management – FACTS
- Soil and water – Soil and water management
- Advanced modules, e.g. Quality of Soils - Advanced modules

The Certificate in Sustainable Land Management will replace the BETA Conservation Management course and form one of the required qualifications for achieving the BASIS Diploma in Agronomy.

WHISTLEBLOWING POLICY

BASIS Registration Ltd is committed to the highest standards of openness and accountability. Therefore, we expect employees, candidates and others who work with BASIS, who have serious concerns about any aspect of our work to voice those concerns.

To this effect BASIS has a Whistleblowing Policy. This procedure is designed to allow concerns of a public interest kind within BASIS to be raised, investigated and where appropriate, acted upon. Complaints may be made by or about any member of staff, candidates or those contracted to provide services to BASIS.

To view the full Whistleblowing Policy, go to:
http://www.basis-reg.co.uk/documents/BASIS-whistle-blowing-policy.pdf

DYSLEXIA POLICY

BASIS Registration Ltd allows students diagnosed with dyslexia to request special examination arrangements. Proof of dyslexia is required a **minimum of 4 weeks** before the exam date so that BASIS can provide special examination arrangements if required.

For a full copy of our Dyslexia Policy please go to:
https://basis-reg.co.uk/documents/Dyslexia-Policy.pdf

COMPLAINTS POLICY

For a full copy of our Complaints Policy please go to:
https://www.basis-reg.co.uk/documents/Complaints-Procedures.pdf

EXAMINATION GUIDELINES

Examinations are conducted by BASIS for candidates and BASIS Approved Trainers, who run training courses for the Certificate in Sustainable Land Management module across the UK. The examination procedure and structure for the assessment of this course is covered below.

EXAMINATIONS

The examination for the BASIS Certificate in Sustainable Land Management is comprised of two elements:

- Written paper – A written paper formed of 25 multi-choice questions and a choice of 5 from 10 short answer questions, to be completed in 2 hours and 10 minutes.
- Viva panel – 20 minute discussion with BASIS Exam Chair and examiner covering aspects of the Certificate in Sustainable Land Management syllabus and practical application of learning to the field.

The pass mark is 70% for each element.

YOUR QUESTIONS ANSWERED

ARE THERE ANY REQUIREMENTS BEFORE COMPLETING THE TRAINING COURSE?

It is recommended that those attending the training course have a **minimum of six months in-field experience** before attending the course.

DO I NEED TO TAKE A TRAINING COURSE IN ORDER TO SIT THE CERTIFICATE IN SUSTAINABLE LAND MANAGEMENT EXAMINATION?

Not necessarily, if you feel you already have enough technical knowledge and practical experience with the full range of topics applicable to the examination. Theoretical knowledge without an understanding of its practical application would not be sufficient for a candidate to pass the exam.

Candidates are able to book an exam directly with BASIS without attending a training course. To do this, it is advised that they feel satisfied that they have the required knowledge across all syllabus subjects, in order to complete the assessment.

WHAT FORM DO THE TRAINING COURSES TAKE?

The training courses depend on the trainer/training provider, the chosen course and on the candidate's previous experience to-date.

Courses can run for a minimum of 5 days. Students will be provided with a link to pre-course reading in advance of the taught elements of the course and will be required to complete this, so that they are familiar with the key aspects of the syllabus in advance of the taught elements of the course.

WHERE ARE TRAINING COURSES HELD?

Details of trainers and locality can be obtained from page 25.

HOW DO I APPLY TO TAKE A TRAINING COURSE?

Contact the Training Provider of your choice and complete a training course application form or contact BASIS for advice.

WHAT IS THE ESTIMATED TIMING SPLIT OF MODULES IN THE TRAINING COURSE?

The estimated split of time spent on each module is outlined as below:

1. Sustainable land management legislation, policy and economics – 25%
2. Habitat and species management – 25%
3. Soil and water management – 10%
4. Air quality, climate change, energy and waste management – 10%
5. Integrated pest management – 10%
6. Farming and the wider environment – 10%
7. Integrated delivery – 10%

WHEN AND WHERE ARE EXAMINATIONS HELD?

Examinations are held when there are sufficient numbers to make them viable, usually following a training course and at a venue chosen by the training provider and agreed with BASIS, or online.

WHAT DOES THE EXAMINATION ENTAIL?

Details can be found in this syllabus booklet on page 5.

IF I FAIL THE EXAMINATION, CAN I RE-SIT?

Yes, you can re-sit the exam; however, BASIS examinations are accredited on the Higher Education qualifications framework. One consequence of this is that we need to ensure procedures are in place to improve a candidate's chances of success in subsequent examinations following a previous failure.

Where candidates have been examined unsuccessfully on two occasions, they will be required to retrain before attempting the exam for the third time.

Candidates and trainers will be required to complete a form to confirm that they have retrained, particularly covering areas that were identified as 'areas of weakness' at previous exams.

The form should be presented to the exam invigilator at the third exam attempt. Failure to confirm that retraining has taken place will result in a subsequent 'no result' for the exam.

Please help us to help you by asking your training provider to evaluate your training needs and undertake the training required to ensure you can pass the exam.

WHEN WILL I RECEIVE MY EXAMINATION RESULTS?

We aim to issue results and feedback within 20 working days of the date of examination. **Please note results will not be given over the telephone.**

MODULE 1 – SUSTAINABLE LAND MANAGEMENT LEGISLATION, SYSTEMS AND SCHEMES

Aims: Candidates must be able to understand the legislative and policy framework of sustainable land management in the farmed landscape. Candidates will be able to recognise different farming systems and discuss the business considerations of decisions. Candidates must be able to outline the supporting research and guidance and the opportunities for the use of digital mapping in the farmed environment.

Essential knowledge and skills

Candidates must be able to demonstrate their knowledge in the four key areas outlined below.

1.1 Farming legislation and policy

Candidates should be able to:

- Understand the importance of sustainable farm and environmental land management in the farmed landscape and the current policies and legislation in the UK.
- Explain the key targets and milestones outlined in the 25 Year Environment Plan, Agriculture Act, Environment Act, Clean Air Strategy, National Pollinator Strategy and Net Zero Strategy. Recognise the key delivery mechanisms in place to help achieve these targets on a national, regional and local level.
- Understand the historical importance of both international conventions and national agreements or reports, e.g. the Earth Summit (Rio de Janeiro, 1992), World Summit on Sustainable Development (Johannesburg, 2002) and UK's State of Nature report.
- Have awareness of key changes and components of wildlife legislation affecting wildlife law, for example: The Wildlife and Countryside Act 1981, The Conservation of Habitats and Species Regulations 2010 and the Countryside and Rights of Way (CRoW) Act 2000.
- Discuss the UK-wide context for cross compliance, Statutory Management Requirements (SMRs), and Good Agricultural and Environmental Conditions (GAECs), and how they underpin good environmental management. Demonstrate an awareness of the Codes of Good Agricultural Practice (CoGAP) as a source of guidance.
- Explain how the current and new agri-environment schemes work in the relevant country (for example Environmental Stewardship, Countryside Stewardship and the Environmental Land Management Schemes (ELMs)) and how funding can be accessed by farm businesses.

1.2 Farming systems, research and guidance

Candidates should be able to:

- Define key terms, for example: biodiversity, natural capital, ecosystem services, climate change.
- Understand the concept of Integrated Pest Management (IPM), Integrated Crop Management (ICM), Integrated Farm Management (IFM) and regenerative agriculture and the differences between the systems and definitions.

- Understand the basic principles of organic farming systems and the productivity and environmental impacts of such systems.
- Compare the relative merits of organic and conventional farming practices with an understanding of the economic and environmental aspects of each.
- Understand the certification process for organic farming systems and the importance of this.
- Understand key principles and requirements behind farm assurance schemes and protocols in the UK and recognise the major assurance schemes (for example Red Tractor, LEAF Marque, RSPCA Assured) and their main attributes.
- Identify ways in which environmental management is encouraged through the food supply chain.
- Outline the role of key UK carbon codes, for example the Woodland Carbon Code, Peatland Code, Hedgerow Carbon Code and the UK Farm Soil Carbon Code.
- Outline the nutrient neutrality approach and describe the key features.
- Demonstrate an understanding of the key research behind agri-environment options and outcomes and key farm wildlife research projects, e.g. The Allerton Project (winter supplementary feeding), RSPB Hope Farm, Demonstration Test Catchments (water catchment research).
- Understand the range of publications and information sources available in the industry that showcase conservation management best practice, for example: Catchment Sensitive Farming (CSF), Championing the Farmed Environment (CFE), FarmWildlife, Agricology, AHDB and the Voluntary Initiative (VI).

1.3 Farm business economics

Candidates should be able to:

- Understand the business opportunities and impacts of agri-environment schemes and wider funding options, including income vs management costs.
- Advise on sources of finance/funding available to a farm business or land manager.
- Explain key terminology, such as gross margin, net margin and know typical examples of enterprise and agri-environment margins and costs, for example machinery and labour costs.
- Demonstrate knowledge of agri-environment payment rates and the cost of implementation of options, for example seed mixes, establishment and management.
- Understand the implications of advice on farm costs and surplus and be able to identify win-win situations.

1.4 Digital mapping

Candidates should be able to:

- Identify ways to scope strategic priorities for a farm business, for example the use of MAGIC maps data layers.
- Understand ways to spatially map land management interventions.
- Explain ways of using GIS systems for the recording of data, such as survey information or physical environment assessments.
- Describe ways of using digital mapping tools for the interrogation of data and ongoing management.

MODULE 2 – HABITAT AND SPECIES MANAGEMENT

Aims: Candidates must be able to demonstrate an understanding of why farmland wildlife populations should be conserved and where possible, increased. They must also be able to demonstrate an understanding of the key farmland habitats, the species that they support and the measures required to protect, link and enhance these areas.

Essential knowledge and skills

Candidates must be able to demonstrate their knowledge in the key areas outlined below.

2.1 Wildlife and biodiversity policy

Candidates should be able to:

- Identify key wildlife and biodiversity policy and demonstrate how and why they are relevant to agriculture.
- Understand the Defra metric, biodiversity net gain and its relevance in funding habitat creation on-farm.
- Understand the reasoning, need and history for Section 41 species and habitats.
- Understand the principles behind the development of a planned approach to species and habitat conservation.
- Be able to advise farms on managing biodiversity based on Countryside Stewardship (CS), including the Wild Pollinator and Farm Wildlife Packages and understand planned operation of ELMs schemes, including the Sustainable Farming Incentive, Local Nature Recovery and Landscape Recovery.

2.2 Habitat creation and management

Candidates should be able to:

- Understand how to identify, manage, protect and link existing habitats.
- Understand habitat classification and condition assessment.
- Explain how they would survey and map habitats and species, including both Phase 1 and UKHab.
- Demonstrate ways of creating relevant new habitats based on landscape characteristics, soil type, and actual location.
- Recognise how the management of key habitats and species can be integrated with agri-environment schemes and other incentives, and how this can support a profitable farm business.
- Identify the main agri-environment options, for example pollen and nectar mix, wild bird seed mix, legume and herb rich swards, field corners, grass margins.

- Understand ways of selecting, siting, establishing and managing agri-environment options and features, including matching to soil type, rotational vs non-rotational options, annual vs perennial management and weed control, for example herbicide options.
- Identify key wildlife needs and explain how this links to habitat creation and management, in addition to game management and use of agri-environment schemes.
- Show an understanding of methods used to encourage natural regeneration of various ecosystems.
- Outline how you would monitor and evaluate the success of habitat creation projects, and how these areas would be monitored to ensure their success.

2.2.1 Trees, woodland and scrub

Candidates should be able to:

- Identify the benefits of trees in the landscape for the farm business and the environment.
- Explain key methods for the management of woodland habitats, including in-field trees, mature and new woodland, shelterbelts, grazed woodlands, riparian woodlands and wood pasture.
- Demonstrate an understanding of woodland structure and the inclusion of rides/open space.
- Outline management techniques of existing woodland and the importance of that management, for example species choice, dead wood, coppicing and needs of specialist woodland species, such as dormouse, bats, birds and butterflies.
- Outline best practice for tree planting or natural regeneration, as appropriate, including in-field trees.
- Understand the key principles of agroforestry.
- Outline the key techniques for scrub management.

2.2.2 Boundary features

Candidates should be able to:

- Explain the role of hedgerows in the landscape and the importance of effective hedgerow management.
- Outline best practice for hedge planting, trimming and ongoing management.
- Understand the importance of ditches and their role for water management and wildlife.
- Identify features of ditches and detail the key management techniques used for biodiversity and water quality.

2.2.3 Grassland

Candidates should be able to:

- Define the key features of different grassland types, including for example: upland and lowland calcareous grassland, acid grassland, hay meadows, flood meadows, pasture, and permanent vs temporary grassland.
- Identify and understand the key principles behind different grazing regimes, to include extensive grazing and mob grazing. Demonstrate the differences between key livestock types, including an understanding of how they graze, the impact they can have on sward structure and composition and the different timings of grazing.
- Demonstrate a knowledge of grassland production systems, such as haymaking and silage production, how these systems can benefit the environment and how any potential environmental impacts can be minimised.
- Show a knowledge of the potential benefits and impacts of livestock and grassland management systems on soil health, including soil structure and soil biology, and the subsequent influence on water quality and carbon sequestration. Understand how different leys can influence soil health and livestock production.
- Discuss the use of specific agri-environment options for grassland farming systems.

2.2.4 Other habitats

- Describe and explain the importance of wetland habitats, their structure and management.
- Describe and explain the importance of lowland and upland heathland habitats, their structure, and management.
- Describe and explain the importance of species-rich arable plant communities, their structure, and management.

2.3 Species

Candidates should be able to:

- Identify key wildlife and plant species (especially protected species) that are associated with farmed land and their typical lifecycle requirements and environmental preferences. This will include those species found in or around unpopulated or derelict buildings.
- Outline how to identify key species and understand the importance of identifying the species present on a farm and its immediate locality.
- Understand the breeding, feeding and habitat requirements for a range of key farmland species.
- Recognise which key species and groups of species have declined and which have increased in agricultural landscapes. Describe the likely causes of these changes. Include consideration of key migratory species dependant on UK farmland.

- Identify the key management techniques and options that could be implemented to protect and encourage healthy populations of key species on-farm.
- Identify a range of important non-native invasive species and demonstrate an understanding of the threats they pose and main management control methods for key examples.
- Have an awareness of best practice predator and vermin control.
- Understand the work of the Campaign for Responsible Rodenticide Use (CRRU) and Wildlife Incident Investigation Scheme (WIIS).
- Explain best practice for the management of cross-taxa conflicts.

MODULE 3 – SOIL AND WATER MANAGEMENT

Aims: Candidates will know the principles governing good soil chemistry, biology and physics, how to ensure best practice in managing soils and the main measures for the protection of soil, maintenance of soil health and agricultural productivity. Candidates must understand the relationships between land management and water quality to enable the best use of land and the minimisation of both point source and diffuse pollution. They must have knowledge of the need to protect air quality and introduce measures to combat climate change.

Essential knowledge and skills

Candidates must be able to demonstrate their knowledge in the key areas outlined below.

3.1 Soil management

Candidates should be able to:

- Demonstrate knowledge of the principal soil types and their key features.
- Understand the importance of soil chemical, biological and physical properties.
- Describe how to conduct a soil health assessment, including soil analysis, soil structure and soil biology assessments.
- Recognise best practice and features of poor soil structure (compaction, panning, capping, slumping, poaching etc.).
- Recognise the features of soil erosion (sheet erosion, soil wash, rills, gullies, deposition).
- Explain how soil type and soil structure influence productivity, erosion and run-off risk.
- Understand how to prepare a soil management plan.
- Understand how to increase soil organic matter levels to improve soil structural stability, for example using cover cropping and organic matter additions.

3.2 Water quality

Candidates should be able to:

- Understand why water quality is important.
- Understand the source, pathway, receptor model, which can be used when discussing mitigation measures to improve water quality, on-farm and across a river catchment.
- Understand the impacts of point and diffuse pollution in water, for example sedimentation and eutrophication.
- Understand how to reduce diffuse pollution of water and key mitigation measures, e.g. use of the rotation, farm infrastructure measures, such as yards and track management, in-field measures such as buffer strips, beetle banks and sediment traps.

- Understand the basic principles of nutrient and manure management with specific reference to use of nutrient and manure management plans, the utilisation of organic amendments (e.g. manures, sewage sludge and green waste) and low-emission spreading technologies.
- Understand the importance of effective use of plant protection products, including choice of product, correct storage, transportation, filling and application.
- Understand how livestock management can impact on water quality through medication and treatments, such as sheep dip and worming agents, animal feed, grazing management and watercourse access.
- Understand the sources of information and delivery initiatives, for example Catchment Sensitive Farming, Championing the Farmed Environment, Tried & Tested, Rivers Trust and CaBA programmes.

MODULE 4 – AIR QUALITY, CLIMATE CHANGE, ENERGY AND WASTE MANAGEMENT

Aims: Candidates must be able to understand key air quality pollutants, the importance of carbon, its effect on climate change and on-farm mitigation measures. Candidates should be able to discuss the importance of efficient energy use and appropriate waste management strategies.

Essential knowledge and skills

Candidates must be able to demonstrate their knowledge in the key areas outlined below.

4.1 Air quality, carbon and climate change mitigation

Candidates should be able to:

- Identify key air pollutants associated with agriculture, including ammonia, greenhouse gases, methane, nitrous oxide, carbon dioxide and odour.
- Describe the impacts of pollutants and key mitigation measures to ensure clean air.
- Define and explain the importance of climate change, carbon emissions and net zero, and agriculture's contribution in the UK.
- Discuss the methods of calculating carbon emissions on-farm and key data inputs.
- Identify the key measures to reduce carbon emissions on-farm and ways to promote low carbon practices, including carbon storage, sequestration.
- Outline the implications that a changing climate has on the farmed landscape, the importance of carbon and the role of farms and the wider farming sector in dealing with climate change challenges.

4.2 Energy use and efficiency

Candidates should be able to:

- Identify and discuss the benefits associated with improving energy efficiency and how energy efficiency on-farm can be maximised.
- Discuss on-farm renewable energy opportunities, including an awareness of potential funding.
- Discuss biofuels and future opportunities of using the technology.

4.3 Waste management

Candidates should be able to:

- Understand the requirements of UK waste regulations and their impact on farm management, including agricultural waste exemptions, moving and disposing of agricultural waste, manure and slurry management, hazardous waste and spreading waste to land.
- Discuss the environmental benefits of minimising farm waste and maximising recycling opportunities.

MODULE 5 – INTEGRATED PEST MANAGEMENT

Aims: Candidates must be able to demonstrate an understanding of the importance of integrated pest management (IPM) and show how practical implementation of IPM strategies on-farm can support sustainable crop production.

Essential knowledge and skills

Candidates must be able to demonstrate their knowledge in the key areas outlined below.

5.1 Integrated pest management

Candidates should be able to:

- Define integrated pest management (IPM) and be able to outline the IPM pyramid and hierarchy of measures.
- Define and explain the importance of the use of an Integrated Pest Management Plan and outline how they would complete an IPM Plan.
- Understand the benefits and importance of crop rotations, variety choice and the role they can play in managing pest/disease/weed issues.
- Recommend best practice measures to ensure that IPM strategies can be achieved on-farm, using key examples.
- Explain the practical application of economic thresholds for pests and diseases and lag periods.

5.2 Pests and beneficials

- Identify key pests, parasites, pathogens and natural enemies.
- Explain the key monitoring techniques for assessing pest and beneficial insect populations.
- Explain the importance of, and habitat requirements for, key insects for relevant agricultural crops, such as pollinators or beneficials.
- Understand the importance of plant protection product choice, good application practice and liaising with local beekeepers in protecting bees.
- Explain the measures you would implement to protect and increase populations of non-target organisms on-farm.
- Outline the effects of habitat provision and management on the populations of beneficials (e.g. using the SAFE approach) and the effective use of conservation biological control.

MODULE 6 - FARMING AND THE WIDER ENVIRONMENT

Aims: Candidates must be able to demonstrate a broad understanding of how farming fits into the wider environment, including sensitive management of historic features and the range of opportunities the wider rural environment offers to both farm businesses and the general public.

Essential knowledge and skills

Candidates must be able to demonstrate their knowledge in the key areas outlined below.

6.1 Historic environment

Candidates should be able to:

- Identify the main historic environment and archaeological features found on-farm, including traditional farm buildings, Scheduled Ancient Monuments, ridge and furrow.
- Discuss the management of in-field historic features, including crop establishment by direct drilling, arable reversion etc.
- Outline how high-water levels can be used to protect archaeology and the maintenance of designed/engineered water bodies.
- Understand the maintenance and restoration requirements of traditional water meadows.

6.2 Public access, education and diversification

Candidates should be able to:

- Appreciate the principal legal requirements of statutory access through public rights of way, the CRoW Act and the Countryside Code.
- Understand permissive access.
- Recognise the importance of education and the promotion of public awareness of agriculture and its contribution to our environment by organisations, such as The Country Trust and Linking Environment and Farming (LEAF), as well as initiatives such as Open Farm Sunday, FarmerTime, NFU Education.
- Understand the opportunity for diversification and additional farm income, for example from holiday lets, sporting and leisure activities.

MODULE 7 – INTEGRATED DELIVERY

Aims: Candidates should be able to appreciate how to bring together sustainable farming practices and the environment through balancing priorities and requirements for a specified business. Candidates will be able to understand the value of working at a landscape or catchment scale to deliver against key environmental ambitions, along with methods of collaboration, at scale.

Essential knowledge and skills

Candidates must be able to demonstrate their knowledge in the key areas outlined below.

7.1 Integrated scoping and delivery

Candidates should be able to:

- Understand how to carry out an initial scoping of assets, either of a farm business or land area along with the individuals and organisations involved.
- Identify the different motivations for land management and how to match management options to the approach.
- Explain the benefits of landscape-scale approaches and appreciate how the implementation of on-farm conservation management has impacts on a landscape scale for soil, water and wildlife management.
- Recognise how key habitats can be linked across the farmed landscape and beyond and describe the benefits that these connections can bring to both increase the range and population of associated species.
- Identify how measures can be implemented at a catchment scale to impact on water quality or air quality, for example large scale nutrient management solutions in a drinking water catchment.
- Demonstrate an understanding of agri-environment options and landscape scale initiatives, for example facilitation fund/cluster groups or large-scale re-wilding initiatives, and their role in supporting landscape and catchment scale outcomes.
- Identify a requirement for collaboration in specific areas to achieve outcomes at a landscape scale, for example common land, National Parks or similar.
- Discuss how to balance priorities in an area and for individual farm businesses to achieve sustainability for biodiversity, carbon, water, food production and productivity, for example.

SAMPLE QUESTIONS FOR THE CERTIFICATE IN SUSTAINABLE LAND MANAGEMENT EXAMINATION

The following sample questions give a guideline of the type and presentation of questions candidates will have to answer when taking the Certificate in Sustainable Land Management examination.

MULTIPLE CHOICE QUESTIONS

1. **Completing an Integrated Pest Management Plan (IPMP) is intended to:**
   (a) Identify integrated pest management strategies that can be used on-farm in each cropping season
   (b) Identify the hazards and manage the risks of using plant protection products to an operator
   (c) Minimise residue levels in crops
   (d) Help minimise the impact of insecticides on water quality

2. **Access to damp pasture land is of benefit for:**
   (a) Skylarks
   (b) Yellowhammers
   (c) Lapwings
   (d) Corn buntings

3. **A herbicide sprayed onto an arable crop adjacent to a field growing horticultural crop is more likely to** cause damage if it is:
   (a) Leachable
   (b) Persistent
   (c) Of a high mammalian toxicity
   (d) Volatile

4. **The Voluntary Initiative is:**
   (a) An NFU/CLA initiative for the management of voluntary set-aside land
   (b) A stewardship initiative for the use of crop protection products
   (c) A stakeholder group involving the manufacturers and distributors of pesticides
   (d) A stakeholder group from across the agricultural industry seeking to enhance biodiversity

5. **Under the CRRU code for responsible rodenticide use, which of the following is correct**?
   (a) Never leave bait exposed to non-target animals and birds
   (b) Leave bait out year-round
   (c) Bait stations should be checked once
   (d) Leave bodies of dead rodents for predators and scavengers

SHORT ANSWER QUESTIONS

What are the key considerations to take into account when: a) establishing new hedges (*5 marks*) b) managing an existing hedgerow (*5 marks*).

Discuss the role that soil structure plays in soil health and identify means by which a farmer might improve their soil structure on-farm. (*10 marks*)

USEFUL WEBSITES AND PUBLICATIONS

- Agricology
  https://www.agricology.co.uk/

- AHDB GREATSOILS
  https://ahdb.org.uk/greatsoils

- Catchment Based Approach Demonstration Test Catchments
  https://catchmentbasedapproach.org/learn/demonstration-test-catchments-dtc/

- Catchment Sensitive Farming
  https://www.gov.uk/guidance/catchment-sensitive-farming-reduce-agricultural-water-pollution

- CFE (Championing the Farmed Environment)
  https://www.cfeonline.org.uk/

- CEH Habitat Creation and Management for Pollinators
  https://www.ceh.ac.uk/sites/default/files/Habitat%20Management%20and%20Creation%20For%20Pollinators.pdf

- Defra Guide to Cross Compliance in England
  https://www.gov.uk/guidance/guide-to-cross-compliance-in-england-2021

- Defra Protecting our Water, Soil and Air: A Code of Good Agricultural Practice for farmers, growers and land managers (CoGAP)
  https://www.gov.uk/government/publications/protecting-our-water-soil-and-air

- Defra Countryside Stewardship
  https://www.gov.uk/government/collections/countryside-stewardship

- Defra Funding for Farmers -
  https://www.gov.uk/guidance/funding-for-farmers

- FarmWildlife
  https://farmwildlife.info/

- Hedgelink Hedgerow Management Advice
  https://hedgelink.org.uk/hedgerows/hedgerow-management-advice/

- Historic England
  https://historicengland.org.uk/

- Integrated Pest Management Plan
  https://voluntaryinitiative.org.uk/schemes/integrated-pest-management/

- LEAF
  https://leaf.eco/

- Plantlife
  https://www.plantlife.org.uk/uk/discover-wild-plants-nature/habitats/arable-farmland

- RSPB
  https://www.rspb.org.uk/our-work/conservation/conservation-and-sustainability/farming/

- The Allerton Project
  https://www.allertontrust.org.uk/research/

- Think Wildlife Campaign for Responsible Rodenticide Use
  https://www.thinkwildlife.org/about-crru-uk/

- Voluntary Initiative (VI)
  https://voluntaryinitiative.org.uk/

- WILDCRU Wildlife & Farming Conservation on Lowland Farms Handbook
  https://www.wildcru.org/files/wildcruhandbook.pdf

- Wildlife Law in the UK
  https://www.wildlifetrusts.org/uk-wildlife-law

BASIS APPROVED TRAINERS

The following colleges, trainers and training providers are successfully running the Certificate in Sustainable Land Management courses and have been accepted as BASIS Approved Trainers.

Chelmsford & West Essex Training Group
2 Salisbury Cottages
Maldon Road
Hatfield Peverel
CHELMSFORD
Essex CM3 2HS

Contact: Debbie Wedge
Tel: 01245 381193
Email: debbiewedge@cwetg.org
Trainer: Debbie Wedge
Web: http://www.cwetg.org

The Game & Wildlife Conservation Trust: The Allerton Project
Loddington House
Loddington
LEICESTER
LE7 9XE

Contact: Jemma Clifford
Tel: 01572 718730
Email: allertontraining@gwct.org.uk
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09 February 2024