

# BSc (HONS) ECOLOGY AND WILDLIFE CONSERVATION (WITH INTEGRATED FOUNDATION YEAR)

Institute of Science and Environment

Academic Level:	6	Credits:	480
UCAS Code:	D512		
Awarding Body:	University of Cumbria		
Delivery Site:	The Integrated Foundation Year will be delivered at the Carlisle Fusehill Street campus All remaining levels will be delivered at the Ambleside Campus		
Programme Length:	Standard Registration Period: 4 years Maximum Registration Period: 8 years		
Mode of Delivery:	Face to Face		
Pattern of Delivery:	Full Time		
	Total weeks of study:	24 weeks	
	Delivery pattern:	2 × 12-week semesters	
	Standard semester dates:	Yes	
PSRB:	The programme has been mapped against the Chartered Institute of Ecology and Environmental Management (CIEEM) accreditation competency framework but is not currently accredited.		
	Date of accreditation: TBC	Accreditation period: Five Years	
Programme Webpage:	<a href="https://www.cumbria.ac.uk/study/courses/undergraduate/bsc-hons-ecology-and-wildlife-conservation-ify/">https://www.cumbria.ac.uk/study/courses/undergraduate/bsc-hons-ecology-and-wildlife-conservation-ify/</a>		

## Entry Criteria

The University's standard criteria for admissions apply. Please refer to the [Applicant Information](#) pages of the University website for more information. For [APL](#), please refer to the University website. Detailed criteria for admission to this programme can be found on the programme webpage.

## PROGRAMME AIMS AND OUTCOMES

### Programme Aims

By the end of this programme learners will be able to:

1. Provide a supportive transitional route into higher education equipping you with the skills essential for successful participation in academic study.
2. Develop an inter-disciplinary knowledge and understanding of theoretical concepts in a range of contexts applicable to studying Ecology and Wildlife Conservation.
3. Develop the academic personal and professional skills required to work in the context of conservation.
4. Develop the knowledge and skills needed for success in your undergraduate studies. Pursue successful academic, graduate, and vocational careers across the ecology and wildlife conservation sectors, and beyond.
5. Pursue successful academic, graduate, and vocational careers across the ecology and wildlife conservation sectors, and beyond.
6. Apply evidence-based and research-led teaching and learning methods to support your personal and professional development.
7. Demonstrate comprehensive knowledge and understanding of species, habitats, ecosystems, and planetary processes.
8. Professionally apply appropriate practical field, laboratory, and digital skills to inform the understanding and monitoring of biodiversity and conservation action.
9. Demonstrate expertise and commitment to professional, ethical and safety practices relevant to environmental science and wildlife conservation and enhance your transferable skills of value to other types of employment and post-graduate study.
10. Use authentic real-world examples and multi- and interdisciplinary approaches to understand and inform policy and practice that addresses global challenges in wildlife conservation and sustainable development.
11. Use written, oral, and digital communication skills to effectively present complex concepts and findings and explain evidence-based arguments to a range of audiences.
12. Appreciate and evaluate the importance of human dimensions in ecology and conservation science at individual, community, national and global scales using appropriate data, literature, legislation, guidelines, and frameworks.
13. Design and apply suitable quantitative and qualitative methods to acquire, manage, analyse, and interpret data from a variety of sources using appropriate digital technology.
14. Graduate as a mature, professional, resilient, and confident global citizen, with the ability to think critically and apply your knowledge and skills across disciplines and in a variety of contexts, independently or as part of a team.

### Programme Outcomes – Knowledge and Understanding

The programme provides opportunities for you to develop and demonstrate the following:

**After 120 credits of study (FdCert) you will be able to demonstrate:**

**K01.** Knowledge and understanding of a range of data collection and handling techniques applied within the context of ecology and wildlife conservation.

**K02.** Ability to apply and explain theories, models, concepts and principles that underpin the study of ecology and wildlife conservation.

**After 240 credits of study (CertHE) you will be able to demonstrate:**

**K1.** Knowledge and understanding of core theories, paradigms, concepts, and principles relevant to ecology and wildlife conservation.

**K2.** The ability to identify and understand organisms, and how biogeochemical cycles and processes affect habitats, ecosystems, and biodiversity.

**K3.** Knowledge of the impacts of human activities on organisms and ecosystems, including economic, political, and social aspects of ecology and the natural environment, wildlife management and sustainable use of natural resources.

**K4.** Understanding of the scientific method and the role of research in biodiversity conservation and environmental management.

**After 360 credits of study (DipHE) you will be able to demonstrate:**

**K5.** Comprehensive knowledge of key practices, theories and skills required for biodiversity assessment, monitoring, and management.

**K6.** Critical analysis of the roles of institutions, organisations, governance structures and other interested parties in managing and regulating impacts on the environment.

**K7.** Understanding of study design and survey methods, data management and analysis (including statistical methods and software), and the interpretation, presentation, and evaluation of results.

**K8.** Critical awareness of standard operating procedures to maintain safe working environments, including health and safety protocols, risk assessment, ethical assessment, and data management.

**After 480 credits of study (BSc Hons) you will be able to demonstrate:**

**K9.** Comprehension and critical analysis of the research process and thorough understanding of the role of ecological evidence in formulating effective conservation strategies.

**K10.** Critical evaluation of the historical, political, social, and economic perspectives related to conservation, sustainable development, social equity, ethics, and environmental justice.

**K11.** Integration of information from a wide variety of sources to provide evidence-based evaluation of environmental management practices.

**K12.** Consolidation of knowledge and understanding about the complex, dynamic, multi-, and interdisciplinary nature of ecosystems and human induced environmental change to develop sustainable, evidence-based solutions that address global wildlife conservation challenges.

## **Programme Outcomes – Skills and other Attributes**

The programme provides opportunities for you to develop and demonstrate the following:

**After 120 credits of study (FdCert) you will be able to demonstrate:**

**S01.** Academic, personal and professional skills needed to succeed in higher education.

**S02.** Competence and progressive development in basic and core experimental skills.

**S03.** Fieldwork and data skills, techniques and competencies needed to study and work in conservation.

**After 240 credits of study (CertHE) you will be able to demonstrate:**

**S1.** Proficient taxonomic skills, including an ability to identify a range of plants, fungi, and invertebrate and vertebrate animals.

**S2.** Basic use of digital technologies to access and present scientific information appropriately across a range of styles and formats.

**S3.** Essential practical field and laboratory techniques for surveying, monitoring, and managing environments.

**S4.** Effective team-working skills and the ability to conduct yourself professionally within working and learning environments.

**After 360 credits of study (DipHE) you will be able to demonstrate:**

**S5.** Confident selection of appropriate practical, field and laboratory techniques to survey and monitor biodiversity and habitats to a professional standard.

**S6.** Competence in collection, handling, analysis, and interpretation of qualitative and quantitative data.

**S7.** Effective communication to reach a variety of audiences, using appropriate formats and media.

**S8.** The ability to undertake, review and apply professional standards of health, safety, ethics, data management and wellbeing across learning and research activities.

**After 480 credits of study (BSc Hons) you will be able to demonstrate:**

**S9.** The ability to effectively develop and implement independent research plans, and to conduct and present projects using appropriate quantitative and qualitative techniques and digital technologies.

**S10.** Critical interpretation of material from peer reviewed publications and other professional sources, recognising inherent uncertainties and the dynamic nature of scientific knowledge.

**S11.** Professional level communication, including the ability to present complex concepts and information in a clear and concise manner to suit a wide range of contexts.

**S12.** Awareness of personal and professional development skills, including the ability to identify, reflect on and plan for further training and skill acquisition for ongoing self-improvement.

## PROGRAMME FEATURES

### Programme Overview

Do you have a passion for wildlife and the natural environment? Do you want to be part of the solution to the global threats of climate change and biodiversity loss? Then the BSc (Hons) Ecology and Wildlife Conservation programme is the perfect programme for you!

Our team of highly skilled research scientists, consultants and professional educators have developed the programme to help you gain the knowledge, skills, expertise, and confidence to address these challenges and work towards conserving natural resources and restoring biodiversity now and for the future.

Global ecological processes are essential for the health of people and our planet, but as we progress into the 21<sup>st</sup> century we face unprecedented challenges in maintaining Earth's ecosystems and the vital goods and ecosystem services they provide. There has never been a more important time to learn about ecology and wildlife conservation and to bring about positive change, and career opportunities in the sector are growing all the time.

The BSc (Hons) Ecology and Wildlife Conservation programme addresses key themes to ensure you develop in-depth knowledge of global biodiversity and ecological processes within habitats at varying scales. It will enable you to understand human relationships with the natural world, how our activities affect life on Earth and what we can do to improve matters. You will learn about international Sustainable Development Goals (SDGs) and how they can be used to encourage sustainable use of natural resources.

You will develop professional competencies in conservation science including species identification, ecological survey skills, environmental assessment, and ecosystem management. You will learn about relevant policy, legislation, and standards as well as safe working practices and professional conduct. The programme will also help you develop your communication skills to aid knowledge exchange and apply diverse digital technologies to help you achieve your goals.

At the University of Cumbria you are a person, not a number; we care for our students, our environment, our region, and our world. By joining the BSc (Hons) Ecology and Wildlife Conservation programme, you will become part of a vibrant and inspiring community of like-minded learners, academics, conservation practitioners and employers dedicated to delivering positive and sustainable environmental change.

The programme is delivered over four years. The following sections provide a brief overview of what you should expect from each academic year:

**Your Foundation Year (Level 3)** provides the opportunity for you to settle into University life and gain the confidence and skills to succeed in your chosen degree. You will develop problem-solving skills, intellectual, key scientific, practical and investigative skills and techniques that underpin the study of Ecology and Wildlife Conservation whilst providing you with a grounding in essential university skills and nurturing your career aspirations. You will develop your knowledge and understanding of the key principles of biology, geography and environmental science while also participating in University-wide modules to help you develop key academic and research skills.

**Your first year (Level 4)** is designed to introduce you to life on Earth, fundamental biogeochemical processes, basic ecological theory and the interactions between wildlife, ecosystems, and people. You will develop a toolkit of scientific and digital skills and competencies that you will build upon as your career in wildlife conservation progresses.

**Your second year (Level 5)** will build upon the knowledge and skills gained at L4 and undertake critical review and evaluation of evidence and strategies relevant to conservation science. You will develop professional competencies in ecological survey methods and report writing, and learn how to analyse, handle and present different types of data using quantitative and qualitative techniques. You will gain critical digital skills required for conservation by learning to use Geographic Information System (GIS) and statistical analysis software. Level 5 includes optionality allowing you to tailor aspects of the programme to suit your own interests and talents. The year culminates with a residential field module (UK and/or international destinations) where you will apply and consolidate your learning in preparation for progression into your final year of study.

**Your final year (Level 6)** enables you to apply the knowledge and skills gained so far to develop novel ideas and strategies relevant to ecology and wildlife conservation. A range of modules address management of biodiversity and ecosystems, human dimensions in wildlife conservation and emerging global conservation issues. At L6 you will complete your own, independent dissertation research project (on a topic of your choice) which allows you to focus on aspects of conservation that you are passionate about and helps to refine your organisation and management skills in preparation for postgraduate employment or further study.

A range of specialist field, laboratory, and digital equipment is used across the programme. We have drones for spatial survey and analysis, camera traps and AudioMoths for digital monitoring of biodiversity, a PCR machine and other equipment for genetic analysis, spectrophotometric and chromatographic equipment for nutrient analysis and pollution assessment, as well as a greenhouse gas monitoring assembly. You will have free access to a broad range of general and specialist software. We furthermore use a range of more traditional methods in the programme, building your practical skills for assessment of biodiversity and environmental variables using standard approaches applied in conservation science all over the world.

We are uniquely placed in the heart of the English Lake District to access a wide range of habitats, all in easy reach of our campus in order to undertake fieldwork and explore conservation challenges in practice. Outdoor and experiential learning is central to everything we do with components of most modules delivered through field, laboratory or other practical work (around 45% overall, depending on options, and excluding dissertation practical work). This gives you the best opportunity to experience wildlife and conservation first-hand throughout your studies. Cumbria is home to many endangered and iconic species, such as ospreys and other birds of prey, red squirrels, Atlantic salmon and other rare fish, otters, red deer, butterflies, and a range of rare plants and habitats. We have access to a range of distinctive ecosystems within a short walk or drive of campus, each with their own unique flora and fauna. These include lowland and upland peat bogs, wet and dry heaths, limestone grasslands and Atlantic oak forest, the UK's very own rainforest, not to mention the rivers and lakes the area is so famous for. We work closely with local, national and international conservation organisations to ensure that the degree provides you with the knowledge and skills required for a successful career in ecology and wildlife conservation.

## Learning and Teaching

### Teaching

We aim to deliver an accessible, inclusive, and quality-assured programme that provides academic inspiration and intellectual challenge, with emphasis on the development of professional and transferable skills, so that you can optimise your potential. Our approach to learning and teaching recognises each student as an individual and, as a student at the University of Cumbria, you will be part of an inclusive and diverse learning community. Equally important are the opportunities to interact with others in an interdisciplinary, collaborative, and active learning environment, so you can explore complex issues, positively challenge assumptions, and reflect on ways of thinking.

Our teaching approach and ethos has been developed in line with the University's curriculum design framework. We recognise that you have an active role to play in your learning, and we engage you throughout in developing your knowledge and skills in partnership with the programme team.

Planned to enable you to attain the stated programme aims, teaching and learning are scaffolded through a modular approach to enhance your progressive development. You will be supported in adapting to university life through a vibrant induction week programme, personal tutorials, personal development planning and a wide range of student support services.

Location based learning is central to the learning experience, with attendance at the range of lectures/seminars/practical sessions/group work and field-based activities seen as essential. This is enhanced and given flexibility by use of an online virtual learning environment so that information and activities can be accessed at your convenience. Study resources at other campuses and learning gateways of the University are also available to all.

A variety of learning and teaching methods are used to reflect the variety of individual learning styles that inevitably exist within a group, so that you will experience teaching methods best suited to your own preferred learning style. Methods are designed to support the move to autonomy and independent learning as you progress through your programme, and may include the following:

- **Lectures** provide you with the theory and underpinning knowledge needed for the study of ecology and wildlife conservation.
- **Practical classes** in IT and laboratories will give you the hands-on practical skills required of a conservation scientist and a deep understanding of the relevant professional standards required to work within the sector.
- **Tutorials** allow you to consolidate the knowledge you have gained throughout your studies either one-to-one or in a small tutor-led group. Module-specific tutorials help you embed and explore a deeper understanding of the taught content.
- **Seminars** provide opportunities for discussion and debate, allowing you to explore complex issues from different perspectives and to critically reflect on your own experiences.
- **Problem-based learning** provides opportunities for teamwork and for you to apply knowledge in real-world contexts.
- **Fieldwork** will take the learning outside to teach you hands-on how to collect ecological field data and survey wildlife populations and give you insights into real-world conservation



practices across a range of distinctive ecosystems, including those easily accessible from our uniquely positioned Lake District campus.

- **Research-led/informed teaching** will take multiple forms. Examples of current research in ecology and wildlife conservation, will be used to help you learn how to critique the content, approaches used, data generated, results, discussions, and conclusions. You will conduct research into topics of interest related to your different modules and critically review policy papers and practitioner guidelines. In the final year, you will conduct an independent research project, using an appropriate methodological framework, giving due consideration to health and safety, ethics, and logistical challenges, and situating the research in the appropriate field of literature to demonstrate systematic and detailed knowledge and understanding of ecology and wildlife conservation.
- **Directed and independent study** involves digital resources on Blackboard (virtual learning environment), textbooks and other self-study materials. It is highly important that you engage with the additional resources and materials available to you. Campus based sessions will give you the foundations required of the subject; however, to embed deeper learning and consider new developments, you will be required to undertake further independent study.

### **The Digital Transformation and UoConnectED Digital Graduate**

The [Digital Transformation](#) has already changed the way people work around the world and humanity's adoption and integration of information technology and digital skills into everyday life has profoundly altered many things. The field of ecology and wildlife conservation is no different.

This programme integrates digital proficiencies across the board, using a wide range of application software to meet the [Jisc digital capabilities framework](#). We use a virtual learning environment (Blackboard Ultra) to provide accessible teaching and learning materials for all programmes via a range of digital devices. Bespoke training on how to use this, and access other sources of support is provided during induction week to all incoming. Digital communication, participation and creation is embedded across the programme and modules such as EAWC4002 encourage you to develop their digital proficiencies upon entry to the course, ensuring they have the basic information, data and media literacies needed for critical use of technology and consider the wider aspects of digital identity and wellbeing as applied to professional and personal development during their time at university and beyond.

You will have the opportunity to engage with the Centre for Digital Transformation's UoConnectED Digital Graduate micro credential programme to enhance your digital capabilities.

Providing opportunities for you to be and feel real-world ready, the digital capabilities development micro-credential is embedded within the programme. You will learn subject-specific digital skills within modules and will be supported to develop core technical skills through online guidance hosted on Blackboard. Grounded in the JISC Student Capabilities role profile, the full micro-credential will be achieved in three parts across the timeline of your degree.

At L3, you will be introduced to the role of digital skills in university research and learning, as well as the UoConnectED Digital Graduate framework.

At L4, you will learn the digital skills needed for **‘moving into HE’** and complete a short assessment to check your understanding. Once this is completed, you will receive part 1 of your Digital Graduate Badge.

Once complete, you will build on your knowledge in much the same way to meet the **‘moving through HE’** criteria and complete another short assessment at the end of the year to achieve part 2 of the Digital Graduate Badge.

At the end of the programme, you are encouraged to complete **‘moving on from HE,’** and submit a short reflection on your digital journey, and the digital skills you have learned throughout your degree and how you will put them into place in future. Once this is submitted, you will gain the full UoConnectED Digital Graduate Badge, which you will be able to export to your LinkedIn profile and other online sites to aid with employability.

Not only are these digital badges available, you will also be encouraged to engage with relevant online learning modules provided by external organisations (such as the United Nations Environment Programme’s [Digital4Sustainability Learning Path](#)) as you progress in order to develop awareness of the wider environmental consequences of the digital transformation, keep up to date with this rapidly changing aspect of modern life.

### **Contact Hours**

At **Level 3** you will have an average of 12 contact hours per week. This will typically include eight to ten hours of lectures, seminars and other classroom-based learning and two to four hours of practical work in the field or lab.

At **Level 4** on average, you will have around 12 contact hours per week, typically consisting of eight hours of lectures and around four hours of field, lab or other practical work.

You will be offered two hours of personal tutoring across the academic year to support your transition into higher education and ensure you are making the most of your time at UoC.

At **Levels 5 and 6** an average week will include around nine hours of contact time, with a mix of lectures, seminars, practical activities in the lab, field or IT suite.

You have one hour of tutorial time at these higher levels to discuss your feedback, check progress and support your academic and professional development.

### **Independent Learning**

When not attending scheduled learning activities you will be expected to continue learning independently through self-guided study. You should expect to put around 200 hours of study into each 20-credit module. You will be supported in a progressive acquisition of subject knowledge and skills, gradually advancing towards more independent learning whilst developing a reflective approach to personal progress. For example, exploring research and data analysis are studied at Level 5, preparing you for your Dissertation module at Level 6.

### **Teaching Staff**

Your degree is delivered by a research-active team with diverse and complementary expertise and particular strengths in animal behaviour, marine and freshwater ecology, woodland ecology, human aspects of conservation, conservation genetics, habitat restoration and species reintroduction. We draw on our own experiences of working in conservation in the UK, across Europe and around the

world to illustrate specific issues in wildlife conservation and offer suggestions on how they may be solved. The teaching team are members of the Centre for National Parks and Protected Areas, an inter-disciplinary research centre addressing global issues in natural resource management and biodiversity conservation. The programme team brings considerable expertise, experience, and enthusiasm to the delivery of the programme and we put special emphasis on hands-on, practical, problem-based learning in the field and laboratory paired with analysis and discussion.

The Ecology and Wildlife Conservation programme has been designed to meet the Mandatory Graduate Competencies of the Chartered Institute of Ecology and Environmental Management (CIEEM). Once this new programme is validated and running, we will apply for CIEEM Accreditation. This means that successful graduates will be eligible for free student membership and have the opportunity to attend relevant CIEEM events, meet practising ecologists and environmental managers, and access careers advice from employers within the sector. Any CIEEM resources are already available to you (see [Student | CIEEM](#)), but access will be enhanced after programme accreditation is awarded

## Assessment

Our assessment strategy has been developed to be in line with the University's Learning, Teaching and Assessment Strategy and the Curriculum Design Framework. The overarching consideration is to provide authentic and inclusive assessments, which develop your skills and knowledge while equipping you for graduate employment, regardless of background or learning style. Assessments will therefore often mirror the type of work you will encounter in your future career and may include:

- Laboratory reports
- Field projects
- Computer-based assessments
- Problem solving activities
- Critical analysis of case studies
- Oral, audio-visual and poster presentations
- Dissertation
- Peer and self-assessment
- Group work

Authentic, inclusive assessments across the programme are designed to support your learning and development, preparing you for graduate opportunities and further study (Figure 1).

The Integrated Foundation Year at L3 employs assessment methods designed to help you gain the knowledge and skills you need to join L4 and succeed alongside students entering the programme directly. Assessments include reports, written work, online tests, skills assessments and set exercises to support your learning and provide feedback on areas that would benefit from additional effort.

At L4 assessments centre around development of your **knowledge and skills** to enable you to succeed at higher academic levels. Methods of assessment include portfolios documenting acquisition of important knowledge and skills, literature reviews on relevant topics, assessment of practical skills learned in the field and laboratory, pre-recorded narrated PowerPoints to build

confidence and expertise in delivering oral presentations. Set exercises will test knowledge and comprehension of important definitions and principles used in conservation and we have designed a variety of written assignments which require you to summarise the need for conservation action, consider how ecological theories are applied in practice, demonstrate how physiological and anatomical adaptations of different plants and animals affect conservation decisions and how populations may respond to future environmental conditions under climate change using case studies from the relevant literature. This range of assessments incorporates diverse methods of communication including scientific writing and incorporation of figures, tables and infographics to build your portfolio of scientific and digital skills which you will build on as you progress.

At L5 the challenge increases as we now expect you to integrate more criticality into your knowledge and skills development. At this level written assignments will require more in-depth critical review and analysis of methods, concepts and conservation practice. You will deliver live PowerPoint presentations to your tutor and classmates and demonstrate technical skills in data analysis, geographical information systems (GIS) and field ecology. You will prepare an Environmental Impact Assessment Report following the professional guidelines set out by CIEEM, a bioinformatics laboratory report and write up a field-based research project which you will have designed and delivered in a small group as part of the residential Field Ecology & Wildlife Conservation module. One of the final assessments at L5 is to design a formal research proposal which you may wish to use to help develop your dissertation research project undertaken at L6. This assessment is designed to help you make the most of the break between L5 and L6 and start collecting the data needed for your Dissertation module in your final year of undergraduate study. In your final year assessments emphasise professional skills and enable you to demonstrate how far you have come on your journey through the degree, preparing you for graduate employment and further study. We use a range of assessments that provide authentic experiences of professional skills and require you to integrate knowledge and competencies developed over time. You are required to bring together knowledge and information from a wide range of sources, applying and synthesising ideas and evidence to create novel insights and solutions to current challenges in ecology and wildlife conservation.

The 40 credit Dissertation module provides you the opportunity to design and undertake your own, original research project on a topic of your choice. The assessments allow you to showcase your work through a poster presentation and oral defence at the end of semester 1 and culminates with the Dissertation thesis submitted towards the end of semester 2.

Other assessments include production of Vlogs or Podcasts to demonstrate high level digital proficiencies and awareness of the effects of Digital Transformation in wildlife conservation, oral presentations showing professional communication skills, authentic examination of case studies from the published literature, including reflection and provision of professional level feedback to peers, the production of a scientific paper-style written assessment to break down perceived barriers and encourage you to publish their own research now and in the future and creation of funding proposals, of relevance in graduate roles where finding sources of finance is vital and disseminating outcomes using digital media is standard practice.

Assessment dates and submission deadlines are set out clearly in the relevant module Blackboard sites which are available at the start of delivery of each module.

Extensions and extenuating circumstances may be granted in accordance with the [University's Academic Regulations](#).

### **Feedback**

A variety of informal and formal feedback mechanisms are included within the learning design to support your progression and professional development. Informal feedback may be delivered on an individual or group basis, through synchronous or recorded asynchronous mechanisms, and may include, for example, knowledge checks, verbal, audio, written comments or summaries, peer-review and worked examples. In line with UoC policy, formal feedback on summative assessments will be provided within 20 working days of submission. It will be based on grading criteria linked to the module learning outcomes and aligned to the UoC grade descriptors, which differentiate between the levels of study. Taking a consistent approach across the programme, the feedback will demonstrate how the grade was derived in relation to performance against the grading criteria and identify ways for you to improve in future.

### **Graduate Prospects**

Halting and reversing the current rate of biodiversity loss requires a new generation of skilled conservationists. National and international legislation related to biodiversity and sustainable development, combined with increasing public awareness about threats to natural resources have ensured good employment opportunities for ecologists and conservation scientists with the right knowledge and skills. The Ecology and Wildlife Conservation programme at the University of Cumbria has been designed to meet a need for more graduates in this field. Upon completing the degree, you will have the necessary knowledge, training, and practical experience to work as a ranger, reserves manager, or biodiversity officer for many different conservation organisations (for example Rivers Trusts, Wildlife Trust, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds, Sharks Trust, and Marine Conservation Society). There are many opportunities to find employment with environmental consultancies or statutory authorities like the Environment Agency, and our practical curriculum, aligned with the CIEEM competencies, further enhances your graduate prospects.

For graduates wishing to gain further academic training to establish themselves in conservation research, the degree provides a solid foundation of theoretical understanding and analytical skills for postgraduate study in relevant biological sciences or environmental/ecosystem management. A diverse array of Masters programmes are available in the UK and abroad, and more research-orientated students may wish to go directly into PhD study.

We work very closely with a range of local, national, and international conservation organisations to ensure that the degree provides you with the knowledge and skills required for a successful career in ecology and wildlife conservation. Graduates from our Conservation programmes have secured jobs in a broad suite of organisations such as the RSPB, Wildlife Trusts, Rivers Trusts, zoos and wildlife parks, London Zoological Society, Red Squirrels Northern England, National Trust, aquaculture, sustainable farming, and various environmental and ecological consultancy firms. Several have established themselves as academics at universities and colleges in the UK and abroad. We have good contacts with other conservation practitioners and scientists, and ensure

that the programme covers the practical, analytical, and digital skills and procedures most relevant to the modern workplace.

Jobs that relate directly to an Ecology and Wildlife Conservation degree include:

- Animal handler
- Biodiversity consultant
- Climate scientist
- Conservation adviser/partnership coordinator
- Countryside ranger
- Ecological consultant
- Ecology and monitoring officer
- Ecosystem restoration officer
- Environmental assessor
- Environmental consultant
- Environmental educator
- Field technician
- GIS technician
- Government adviser
- Habitat restoration manager
- Hydrologist
- Pollution manager
- Project officer with NGOs such as Wildlife Trusts, WWF, RSPB, etc.
- Public engagement officer
- Research assistant
- Scientific researcher (MSc, PhD and postdoctoral)
- Water resource manager
- Wildlife reserve manager
- Zookeeper

Jobs where an Ecology & Wildlife Conservation degree can be a useful route of entry may include:

- Blue-green entrepreneur
- Environmental writer/journalist
- Renewable technologist
- Research scientist
- Sustainability adviser
- Teacher

Typical employers could include:

- Campaigning organisations (Greenpeace, Friends of the Earth, Marine Conservation Society, WWF)
- National Conservation NGOs (British Ecological Society, The Wildlife Trusts, National Trust, The Rivers Trust, RSPB, Mammal Society, BugLife)
- Government agencies (Natural England, Nature Scot, Forestry Commission, JNCC, MMO, Environment Agency, Office for Environmental Protection, local councils, national parks)
- International conservation organisations (IUCN, FAO, WWF, Plantlife International)

- Private conservation organisations and charities

## MODULES

Year 1			
Code	Title	Credits	Status
UNIF3003	Essential University Skills 1	20	Compulsory
UNIF3005	Essential Biology	20	Compulsory
UNIF3015	Scientific Investigation	20	Compulsory
UNIF3004	Essential University Skills 2	20	Compulsory
UNIF3017	Environmental Sciences	20	Compulsory
UNIF3018	Dynamic Earth	20	Compulsory
<p align="center"><b>Students exiting at this point with 120 credits would receive a FdCert in Ecology and Wildlife Conservation</b></p>			

Year 2			
Code	Title	Credits	Status
EAWC4001	The Tree of Life	20	Compulsory
EAWC4002	Skills for Ecology and Wildlife Conservation	20	Compulsory
EAWC4003	Key Concepts in Conservation Science	20	Compulsory
EAWC4004	Essentials in Ecology	20	Compulsory
EAWC4005	Form and Function	20	Compulsory
EAWC4006	Earth Systems	20	Compulsory
<p align="center"><b>Students exiting at this point with 240 credits would receive a CertHE in Ecology and Wildlife Conservation (with Integrated Foundation Year)</b></p>			

Year 3			
Code	Title	Credits	Status
EAWC5001	Research Design and Data Analysis	20	Compulsory
EAWC5002	Ecological Census Techniques	20	Compulsory
EAWC5003	Genetics and Evolution	20	Compulsory
EAWC5004	Geographical Information Systems	20	Compulsory
EAWC5005	Field Ecology and Wildlife Conservation	20	Compulsory
EAWC5006	Animal Behaviour and Ecology	20	Optional



EAWC5007	Marine and Freshwater Ecology	20	Optional
<p align="center"><b>Students exiting at this point with 360 credits would receive a DipHE in Ecology and Wildlife Conservation (with Integrated Foundation Year)</b></p>			

<b>Year 4</b>			
<b>Code</b>	<b>Title</b>	<b>Credits</b>	<b>Status</b>
EAWC6001	Dissertation	40	Compulsory
EAWC6002	Ecosystem Management	20	Compulsory
EAWC6003	Environmental Philosophy, Policy and Practice	20	Compulsory
EAWC6004	Advanced GIS and Remote Sensing	20	Optional
EAWC6005	Sustainability, Biodiversity and Conservation	20	Optional
EAWC6006	Behavioural Research in Conservation	20	Optional
EAWC6007	Marine and Freshwater Conservation	20	Optional
<p align="center"><b>Students exiting at this point with 420 credits would receive a BSc Ecology and Wildlife Conservation (with Integrated Foundation Year)</b></p> <p align="center"><b>Students exiting at this point with 480 credits would receive a BSc (Hons) Ecology and Wildlife Conservation (with Integrated Foundation Year)</b></p>			

<b>Additional Module Information</b>
<p>Students choose one optional module to study in at Level 5 and two optional modules at L6. Students make this choice by the start of SEM2 of Level 4 and Level 5. There are no pre-requisites for L5 optional modules, but in order to select certain L6 modules you must have successfully completed a relevant Level 5 module or have or equivalent learning or experience.</p>

<b>Key to Module Statuses</b>	
Compulsory modules	Must be taken although it may be possible to compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed).
Optional modules	Are a set of modules from which you will be required to choose a set number to study. Once chosen, it may be possible to compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed)

Optional modules may be subject to availability and viability. If we have insufficient numbers of students interested in an optional module in any given academic year, this may not be offered. If an optional module will not be running, we will advise you as soon as possible and help you choose an alternative module. Optional modules are normally selected 3 - 5 months in advance.

## **Timetables**

Timetables are available to continuing students from the end of July and new students once they complete online registration. Please note that while we make every effort to ensure timetables are as student friendly as possible, scheduled learning can take place on any day of the week.

Some modules include residential or block delivery components which will require you to engage in teaching and learning activities over a longer period of time and may include activities at weekends in necessary.

This programme may also be made available on an infill part-time basis at the discretion of the academic programme leader. In such cases, you will study modules alongside the full-time cohort(s) that are running at the time.

## ADDITIONAL INFORMATION

### Student Support

The [Student Enquiry Point](#) is a simple way to contact Student Services. Using the Student Enquiry Point tile on the Student Hub you can submit an enquiry to any of the Student Services teams, which includes:

- [Careers and Employability](#)
- [Chaplaincy](#) for faith and spiritual wellbeing
- [Mental Health and Wellbeing](#)
- [Digital Skills](#)
- [Disability and Specific Learning Difficulty \(SpLD\)](#)
- [International Student Support](#)
- [Library](#)
- [Money Matters](#)
- [Safeguarding](#)
- [Skills@Cumbria](#)
- [Sports and Fitness Facilities](#)
- [University Student Accommodation](#)

As a student at the University of Cumbria you automatically become a member of the Students' Union. The Students' Union represents the views and interests of students within the University.

The Students' Union is led by a group of Student Representatives who are elected by students in annual elections. They also support approximately 400 Student Academic Reps within each cohort across the entire University. The Students' Union represent the views of their cohort and work with academic staff to continuously develop and improve the experience for all University of Cumbria students. You can find out more about who represents you at [www.ucsu.me](http://www.ucsu.me).

You can email at any time on [studentvoice@cumbria.ac.uk](mailto:studentvoice@cumbria.ac.uk).

### Course Costs

#### Tuition Fees

Course fees can be found [here for undergraduates](#) and [here for international students](#).

The following course-related costs are included in the fees:

- Access to desktop computers on campus and laptops available in the Barn for you to sign out and use free of charge.
- Registered students are able to install key software and apps free of charge for use on your own devices for the duration of the programme.
- The costs of most UK based field trips and visits are included in the fees.

#### Additional Costs

The following course-related costs are not included in the fees:

### Stationery and IT

Stationery for your own personal use (pens, papers, and folders, etc.). Whilst you choose how much you need, expect to pay around £40-£50 per year for these.

Field notebook (£10 - 15).

Laboratory notebook (£10 - 15).

### Clothing and Equipment

#### Essential:

Waterproof jacket and trousers (£150 - 200).

Walking boots (£50 - 150).

Warm hat and gloves (£30).

Wellington boots (£20 - 100+).

Rucksack (ideally with waterproof cover) for day use (£30 - 50).

Other outdoor clothing e.g., thermals, fleeces, socks, walking trousers, etc. (prices vary).

#### Recommended:

Thermos, water bottle and lunchbox for field trips (prices vary).

Binoculars (prices vary).

### Field Trips

The programme includes a number of field trips in the UK. Many of these are covered in your course fees, but others may incur costs which will vary depending on the activity, typically costing £20 - £60.

There may be an international field trip integrated into the programme. Students may be asked to contribute towards the cost of travel to the field location. In-country travel, park entrance fees, guide fees and the cost of excursions may be extra. You will also need to budget around £20 per day for meals. If vaccinations and anti-malaria treatment are required, you will need to cover these costs and you may want other spending money to use when on the trip. An alternative UK trip will be offered where international travel is not possible.

### Books

The University library holds copies of all core texts (including many eBooks, accessible online). But you may wish to purchase your own copies of textbooks or field guides for use on field trips and in your own time. The cost of these varies greatly depending on edition and condition.

## **Exceptions to the Academic Regulations**

This programme operates in accordance with the University's Academic Regulations and Academic Procedures and Processes with the following permitted exceptions:

- There are pre-requisite modules in the programme to ensure that students studying modules at Level 6 have the sufficient knowledge and understanding.
- The transitional arrangements differ from the standard regulations.

## External and Internal Benchmarks

The Ecology and Wildlife Conservation programmes has been developed with reference to Subject Benchmark Statements, published by the Quality Assurance Agency for Higher Education (QAA), for:

- Earth Sciences, Environmental Sciences and Environmental Studies
- Biosciences
- Geography

QAA subject benchmark statements are available from the [QAA website](#).

The programme design meets the Mandatory Graduate Competency Framework of the Chartered Institute of Ecology and Environmental Management (CIEEM) [Higher Education Degree Accreditation Handbook](#).

Employer and external stakeholder engagement has been obtained through completion of a structured questionnaire to ensure the programme meets the specific requirements of the ecology and conservation sector.

Other internal reference points include:

- [UoC Learning, Teaching and Assessment Strategy](#)
- [UoC Academic Regulations and Academic Procedures and Processes](#)

## Disclaimer

This programme has been approved (validated) by the University of Cumbria as suitable for a range of delivery modes, delivery patterns, and delivery sites. This level of potential flexibility does not reflect a commitment on behalf of the University to offer the programme by all modes/patterns and at all locations in every academic cycle. The details of the programme offered for a particular intake year will be as detailed on the programme webpage:

<https://www.cumbria.ac.uk/study/courses/undergraduate/bsc-hons-ecology-and-wildlife-conservation-ify/>

<b>Date of Programme Specification Production</b>	January 2025
<b>Date Programme Specification was last updated</b>	January 2025