

PROGRAMME SPECIFICATION

1	Awarding Institution	Newcastle University
2	Teaching Institutions	Newcastle University
3	Final Award	MSc
4	Programme Title	Wildlife Management Wildlife Management (Credit Accumulation and Transfer Scheme)
5	UCAS/Programme Code	5235F/P 5236P (CATS)
6	Programme Accreditation	N/A
7	QAA Subject Benchmark(s)	none
8	FHEQ Level	7
9	Last updated	September 2021

10 Programme Aims

The overall aim of this programme is to provide a link between the theory and practice of wildlife management from the perspective of the regulatory authorities associated with UK wildlife management. The programme will provide advanced training in policy and science implementation in the UK giving graduates a professionally focussed postgraduate qualification that is directly relevant to a wide range of employment in the wildlife management sector. Whilst much of the training and case studies will be focussed on UK and EU policy, the generic training will allow graduates to work in other countries where policy and management are strongly linked.

Specifically the course aims to provide graduates with:

- Advanced knowledge on wildlife management theory, the principles of biodiversity and conservation, epidemiology, wildlife conflicts and humaneness and welfare issues.
- Practical skills in wildlife and environmental data collection, data analysis, data handling, statistics and modelling methodologies with a focus on providing evidence for policy.
- Field skills in wildlife monitoring, surveying and GIS.
- Critical thinking to address wildlife problems in a policy context.
- The ability to meet the expectation of the Framework for Higher Education Qualifications as at Level 7,

11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. The programme outcomes have references to the benchmark statements for Biosciences.

Knowledge and Understanding

On completing the programme students should acquired detailed knowledge and thorough understanding of

- A1** the complex interactions between human and natural systems, and know how to quantify their relationships
- A2** the mathematics, statistics and models necessary to analyse and interpret environmental data
- A3** the skills to manage complex spatial and remote-sensed data
- A4** the strengths and weaknesses of qualitative and quantitative ecological data
- A5** wildlife disease epidemiology and management
- A6** how research and evidence is used in the formulation of government policy
- A7** human-wildlife conflicts and ethical issues in wildlife management

Teaching and Learning Methods
<p>A1–A6 are achieved by lectures, seminars and case study workshops. The teaching strategy for A1, A3 and A5 includes lectures to set out baseline knowledge, principles and standards, and small group discussions, group exercises and seminars where current knowledge and species specific case studies are presented and examined from a range of perspectives.</p> <p>Students will acquire knowledge, particularly for A5 A7 through team work, case studies, presentations, and independent study and research. Some modules include short problem solving exercises.</p>
Assessment Strategy
<p>Intended learning outcomes (see A1 to A4 above) regarding knowledge and understanding are assessed based on course work involving both written and oral communications at the individual or team level. This will include a variety of continuous forms of assessment including essays, problem-solving exercises, laboratory reports and case studies and provide both formative and summative assessment through relevant examples. For A1, An Oral presentation will be a complementary means of assessing factual knowledge The interactive learning environment, Blackboard, will be used for both formative and summative assessments.</p>
Intellectual Skills
<p>On completing the programme students should be able to:</p> <p>B1 synthesise key findings and knowledge from across natural and social sciences, in particular those relating to wildlife management and associated policy and regulatory frameworks</p> <p>B2 critically evaluate the quality of data and information offered from different sources</p> <p>B3 develop logical thinking and a structured approach to problem solving</p> <p>B4 plan and conduct applied research projects either individually or as a team and critically evaluate results</p> <p>B5 determine the appropriate method for analysis and modelling of data and interpret results.</p>
Teaching and Learning Methods
<p>Intellectual skills in B1 B2 and B5 will be assessed through individual and group work, including coursework assessments and group presentations closed-book examinations. B3 and B4 will be assessed through coursework, and B4 through a substantive research project. All assessments will place an emphasis on understanding, rather than memorising methods. The interactive learning environment, Blackboard, will be used for both formative and summative assessments.</p> <p>Throughout the programme, students will develop intellectual skills by participating in group discussions, case studies and science and technology workshops to enhance their (a) analytical and interpretative faculties and (b) ability to formulate objective and coherent arguments.</p> <p>Field visits and associated team problem solving exercises are the main method used to enhance intellectual skills related to technology transfer capabilities.</p> <p>Design, execution, statistical analysis and reporting of the final dissertation project enhance the learning of these skills in a focused manner.</p>
Assessment Strategy
<p>B1-B5 are assessed through individual and/or group exercises and written coursework B1-B3 are also assessed via oral presentations and problem solving coursework. B1 and B2 are collectively assessed through individual dissertation management and report.</p> <p>The interactive learning environment, Blackboard, will be used for both formative and summative assessments.</p>

Practical Skills
On completing the programme students should be able to: C1 demonstrate bibliographic and key IT skills appropriate to R&D at Master's level C2 design and undertake wildlife surveys and monitoring schemes to collect robust and appropriate data C3 collect data using a variety of methods and sources, C4 manage and critically analyse data using advanced statistical and modelling approaches C5 prepare and present information, in both written and verbal formats, to stakeholders (e.g. policy makers, advisors and consumers) with contrasting levels of knowledge and understanding
Teaching and Learning Methods
The majority of the skills will be developed throughout the degree programme, primarily through coursework and fieldwork including hands-on practical and IT classes. The research project will require students to search the scientific literature and plan data collection (C1 and C2), undertake data analyses (C3 and C4) and, depending on their choice of subject-matter, present results appropriately (C1 , C3 , C4). Some individual modules will be particularly focussed on some practical skills (especially C2 to C5).
Assessment Strategy
The assessment of practical skills (C1-C5) will be based on (a) bibliographies produced as part of essays, seminar presentations and the final project thesis, (b) data handling and analyses carried out as part of problem solving exercises and the project thesis
Transferable/Key Skills
On completing the programme students should be able to: D1 communicate and present research findings (including those from their dissertation) to academic and stakeholder/industry audiences D2 project management skills, including writing proposals, planning of projects and implementation D3 use effective time and resource management practices D4 show insight and strategic thinking in identifying a science-policy issue and determining how best to provide scientific information to inform a policy decision. D5 work effectively as a member of teams both subject specific and multidisciplinary
Teaching and Learning Methods
Transferable/Key skills D1-D5 will be developed throughout the academic year, as students engage with both individual- and group-based lectures, seminars, field visits and practicals. Some modules have a particular emphasis on some skills (e.g. D4 in Policy and Licensing and Invasive Species).
Assessment Strategy
Key skills are not independently assessed. However, D1-D5 are indirectly assessed through coursework, team and individual presentations, research papers and the dissertation.
12 Programme Curriculum, Structure and Features
Basic structure of the programme
The programme will run for 12-months from late September, across 3 Semesters. It will comprise 180 credits, 120 credits taught (Semesters 1 and 2) 60 credits allocated to the research project (primarily running in Semester 3). All modules will be compulsory, with taught modules either 10- or 20-credit valency.
The programme curriculum will be delivered by Newcastle University with major support for the delivery by the NWMC at the APHA. APHA is the agency that provides advice to Defra on wildlife management, is involved with the development, assessment and implementation of policy associated with wildlife problems in the UK. It is concerned with invasive species, wildlife disease and has a large portfolio of research and management that is implemented at the National scale.
The programme will be run as part of the suite of 'Ecology and Conservation' MSc programmes within the School of Natural and Environmental Sciences. These will include Ecological Consultancy, Global Wildlife Science & Policy, Wildlife Management, Ecology & Wildlife Conservation. Students on these programmes will take the same core of three 20-

credit compulsory modules. This will ensure that all students on these degrees will have a solid foundation in both the quantitative and qualitative skills that are essential in modern ecological science. Two of these modules will be taught in Semester 1, so that students benefit from peer-support, and all reach a similar high technical standard before diverging into the different individual degree programmes. Other 10-credit modules are also shared by one or more degree programme, increasing collegiality amongst students, whilst also improving teaching efficiency through larger class sizes.

Newcastle and APHA will provide modules on the necessary ecological and wildlife management theory. Major support for the delivery of the policy focussed modules will be provided by APHA staff or industry guest lecturers. All modules will be assessed by course work. Practical fieldwork elements of the course will take place through the year whenever it is most appropriate to carry out wildlife surveys and sampling in the field. This will enable students to gain expertise wildlife management survey skills in the field and first-hand experience of some current problems and conflicts during the one year MSc course.

Research projects will form a third of the degree credits and will be undertaken in Semester 3. Depending upon the nature of the project the student may spend a significant proportion of this time in the field (i.e. away from Newcastle). Supervision of the research projects will usually consist of one member of Newcastle staff and one member of NWMC centre staff.

All modules align with Universities Qualifications and Credit framework.

Key features of the programme (including what makes the programme distinctive)

Why Wildlife Management?

Wildlife management and conservation is based on understanding the biology of wildlife and understanding how interventions will impact on the long term trends in the population or communities being managed. Understanding the underlying biology to allow intervention is not sufficient, interventions and management have to be acceptable for society as a whole and regulators who will licence or oversee any intervention. Defra is the UK government department that formulates, regulates and oversees implementation of wildlife problems through a range of agencies and advisory bodies. There is a clear need to provide graduates with the necessary theoretical and practical expertise in wildlife management which is framed in the context of the legal and policy requirements of UK regulators.

The underlying aim of this programme is to provide a specialist MSc programme to bridge the gap between theory and teaching of wildlife biology and the practical implementation of research findings to the regulatory framework in which wildlife is managed. The programme is designed to provide training in this close link between science and policy allowing in depth specialisation in Wildlife Management.

There are currently no other specialised MSc programmes on integration of theory and policy implementation of wildlife management in the UK.

Unique features of MSc in Wildlife Management:

The only degree in the UK to equip the graduate with the knowledge, skills and competencies required of a wildlife manager.

Many modules have direct input from the UKs leading wildlife ecologists from the National Wildlife Management Centre at the Animal and Plant Health Agency.

Students will have the opportunity to develop practical skills in wildlife monitoring, surveillance and handling including specific training on humaneness, risk assessment and home office licensing.

Throughout the degree programme the relevance and application of the theory and knowledge is integrated within the UK framework.

Highly quantitative teaching to develop numeric ability and understanding. This will be achieved through familiarisation with techniques and software available for data collection,

surveillance, analysis, modeling and interpretation of results for policy, this will be integrated across the degree course.

Unique course on Wildlife Diseases and Epidemiology.

Students have the opportunity to conduct an independent research project on current wildlife problem.

The programme has a direct relevance to UK political landscape and graduates will have a specific focus on the specialist skills required for UK Government agencies and academic jobs.

Programme regulations (link to on-line version)

[5235FP Programme Regulations](#)

[5326P Programme Regulations](#)

13 Support for Student Learning

Generic information regarding University provision is available at the following link.

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

14 Methods for evaluating and improving the quality and standards of teaching and learning

Generic information regarding University provision is available at the following link.

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

Accreditation reports

Additional mechanisms

15 Regulation of assessment

Generic information regarding University provision is available at the following link.

https://www.ncl.ac.uk/ltds/assets/documents/qsh_progspec_generic_info.pdf

In addition, information relating to the programme is provided in:

The University Prospectus: <http://www.ncl.ac.uk/undergraduate/degrees/#subject>

Degree Programme and University Regulations: <http://www.ncl.ac.uk/regulations/docs/>

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.