PROGRAMME SPECIFICATION	

1	**Awarding Institution**	Newcastle University
2	**Teaching Institution**	Newcastle University
3	**Final Award**	MSc or Diploma
4	**Programme Title**	Wildlife Conservation and Management
5	**UCAS/Programme Code**	MSc – 5026; Dip - 3399
6	**Programme Accreditation**	N/A
7	**QAA Subject Benchmark(s)**	N/A
8	**FHEQ Level**	M
9	**Date written/revised**	22/1/2008

10 Programme Aims

1 The broad educational purposes are to provide students with the theoretical and practice training to equip biology, physical geography or environmental science graduates with the knowledge and skills needed for successful careers in the UK and European wildlife conservation. The programme informs and explains the rationale for wildlife conservation and enables students to understand the implementation of conservation policy. It develops knowledge and understanding of underpinning ecological science and improves key skills in experimentation, survey and monitoring methods for wildlife. Students experience habitat and species management methods and learn to write management plans.

2 Provide a systematic understanding of the range of temperate zone ecosystems and wildlife species, and a critical awareness of contemporary UK and European conservation issues and/or insights, much of which is at, or informed by, the forefront of knowledge about how environmental, management and land-use factors influence ecosystems and wildlife species.

3 Provide a comprehensive understanding of scientific survey and experimental techniques and the ability to identify common species from selected UK habitats

4 Provide an opportunity to demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to develop effective management plans for species and ecosystems.

5 Provide conceptual understanding that enables students to critically evaluate current research and advanced scholarship in the discipline; and to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

6 The programme also equips graduates with key skills such that they are able to:

(a) deal with complex wildlife issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences;

(b) demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level;

(c) continue to advance their knowledge and understanding, and to develop new skills to a high level; and will have:

(d) develop the qualities and transferable skills necessary for employment requiring: the exercise of initiative and personal responsibility; decision making in complex and

unpredictable situations; and the independent learning ability required for continuing professional development.

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.

Knowledge and Understanding

On completing the programme students should develop and demonstrate:

A1 a systematic understanding for the range of temperate-zone ecosystems and wildlife species

A2 a critical awareness of, and/or new insights into, contemporary UK and European conservation issues

A3 advanced knowledge and understanding of the influence of environmental, management and land-use factors on ecosystems and wildlife species

A4 a comprehensive understanding of scientific survey and experimental techniques

Teaching and Learning Methods

Teaching Strategy

Specialist knowledge and understand of the core material is taught via lectures (A1-A4) and field classes (A1-A3) in the compulsory modules. Compulsory and optional residential field classes allow students to experience a wide range of upland and lowland habitats in Britain (A1, A3 and A4). Optional modules enable students to concentrate on particular aspects of individual interest, and/or remedy deficiencies in information technology (A4). Other teaching methods include practical classes (A4), literature reviews (A2) and the design and implementation of research projects (A1, A3 and A4), with the latter also being an important part of the learning strategy.

Learning Strategy

The understanding of lecture material is encouraged through independent reading (A1-A4) assisted by the provision of prioritised reference lists. Such learning is reinforced by formative feedback provided by literature reviews (A3, A4), with active participation in fieldwork and research projects (A1, A3 and A4), with some workshops (A3) and independent problem solving exercises (A4). The 80-credit research project enables survey and/or management knowledge to be learnt through supervised tuition in the study of a particular habitat or species of interest to the student (A3, A4).

Assessment Strategy

Assessment strategy

Most assessment of knowledge and understanding is by formal unseen examination (A1-A4), usually of two hours 2-3 out of 5 questions are answered. Essays submitted as part of coursework provide a fuller test of student understanding of the relevant literature (A2, A3). Field class and other reports are also assessed (A1-A4).

Intellectual Skills

On completing the programme students should be able to demonstrate:

B1 ability to identify common plant and/or animal species from selected UK habitats

B2 originality in the application of knowledge

B3 the use of established techniques of research and enquiry are used to develop effective management plans for species and habitats

B4 ability to develop effective conservation policy and biodiversity action plans

Teaching and Learning Methods

Teaching Strategy
Research and enquiry skills are taught via lectures, seminars and literature reviews and practical classes (B3, B4), with policy planning taught via seminars (B4). The research project is particularly important to consolidate and extend these skills (B1-B4).

Learning Strategy
Independent reading of recommended references is important in understanding how knowledge is applied and techniques used (B2-B4). However, research projects (B1-B4), problem solving exercises (B3, B4) and coursework (B2-B4) are also important and fieldwork is of great importance in learning to identify plant species (B1).

Assessment Strategy

Assessment strategy
Formal examination (B3) is used to assess some subject specific/professional skills, particularly when additional reading reinforces learning. However, most of these skills are assessed by reports on research projects and coursework (B1-B4).

Practical Skills

On completing the programme students should be able to:
C1 critically evaluate current research and advanced scholarship in conservation
C2 evaluate conservation methodologies and develop critiques of them
C3 to propose new hypotheses, when appropriate
C4 deal with complex wildlife issues both systematically and creatively
C5 make sound judgements in the absence of complete data

Teaching and Learning Methods

Teaching Strategy
The compulsory modules are important for developing cognitive skills. In these modules the evaluation of complex management situations and the development of good judgement are important features of seminars (C1-C4), lectures (C1, C2, C4 and C5), research projects (C1, C4 and C5) and literature reviews (C1, C2). These skills are taught in a few of the optional modules.

Learning Strategy
Understanding of the taught material is reinforced by reading (C1, C2, and C3) and particularly through experience of case studies and course work (C1, C2, C4 and C5) and problem solving (C2, C4, and C5). The design of the research projects us also important and is particularly useful for understanding the development of hypotheses (C3).

Assessment Strategy

Assessment strategy
Cognitive skills are assessed by both formal examination (C1, C2, C4, C5) and reports (C1-C5), including that produced for the main project.

Transferable/Key Skills

On completing the programme students should be able to:
D1 communicate conclusions clearly to specialist and non-specialist audience
D2 direct their own work programme
D3 show originality and initiative in tackling and solving problems
D4 act autonomously in planning and implementing tasks at a professional or equivalent level
D5 take personal responsibility to independently advance their knowledge and understanding, and to develop new skills to a high level
D6 use library and other information sources skilfully and appropriately
D7 use IT resources skilfully and appropriately
D8 to make decisions in complex and unpredictable situations

Teaching and Learning Methods

Teaching Strategy
The teaching of key skills is an important part of the MSc throughout many modules. Verbal presentations are encouraged in seminars (D1) and all aspects (D1-D8) are important in the research project. Field classes (D1-D4), workshops (D1, D3-D5, D7 and D8) and independent problem solving (D2-D8) teach students about the importance of communication skills, information sources and originality and independence in the professional implementation of their knowledge.

Learning Strategy
A wide range of methods is used to reinforce the teaching of key skills and aid understanding. Whilst there is some recommended reading (D1-D8) most key skills are better developed through the use of field work (D1-D6), case studies (D1-D4, D6-D8), the research project (D1-D8), workshops (D1, D3-D5, D7), problem solving exercises (D2-D8) and presentations (D1). The project is particularly important in providing students with an opportunity for developing and demonstrating creativity and originality.

Assessment Strategy

Assessment strategy
Reports (D1-D8) and coursework (D1-D4, D6-D8) are the main methods of assessment. Presentations test verbal communication skills (D1).

12 Programme Curriculum, Structure and Features

Basic structure of the programme

This is a one-year, fulltime modular Masters degree programme. If conforms to the modular structure of other MSc programmes taught in the School in three phases similar to the undergraduate semester system. It consists of 100 credits in the taught component and 80 credits for a research project (ACE8096) which takes place in MSc phase 3, University summer term and the summer vacation. The taught component is assessed in the examination period in January, at the end of MSc phase 1, and through phase 2, with most phase 2 modules examined by course work. The report for the project has to be submitted by 19 September.

Most taught modules are of 10 credits with one 20-credit module. There are 30 credits of compulsory modules in phase 1, (ACE8022, ACE8042, ACE8045), 30 credits of compulsory modules in the second phase (ACE8024, ACE8041, BIO8002) and 20 credits (ACE8030, BIO8006) in phase 3. These compulsory modules are part of the core wildlife conservation material for the degree. They focus on the management of conservation projects and appropriate field techniques, conservation policy, issues and management of species and ecosystems. The core conservation material given in conservation biology issues (BIO8002) and ecosystem management (ACE8041) will normally be taken by all students. Optional modules are chosen from a limited list that enables students to substitute and add relevant specialist topics according to their preferences and their prior knowledge.

In Phase 3, MSc candidates undertake an independent project (80 credits) leading to a report (submitted late August). This will normally be a survey or a management plan for a habitat or species, or applied ecological science concerned with a conservation issue. An initial project proposal is developed towards the end of Phase 1 (mid January) and requires students to submit a costed project with links to a conservation organisation. Although not finalised or committed, students are encouraged to further develop their proposal plans during Phase 2, in view of the need to make the most of opportunities presented by independent work. The viva with the external examiner will be in May when the exam board considers the exam and coursework results for the taught component of the degree. The external examiner will discuss conservation project proposals will all or a selection of students at that time and moderate all final project reports in September for the October Board of Examiners. Field identification skills (BIO8006) is also run in phase 3 when plant and animal material is available in a more readily identifiable form for students with little previous experience of species identification.

Students will have to satisfy the standard MSc regulations that apply to MSc degrees in the

School of Agriculture, Food and Rural Development. Decisions on fail, pass, diploma, MSc merit and MSc distinction awards will be made by the Board of Examiners in October after completion of the project work (ACE8096) and will be based on overall performance in all aspects of the subject.

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

The MSc degree utilises a wide range of environmental expertise available in the Faculty of Science, Agriculture and Engineering. It is innovative in enabling wildlife conservation to be studied as applied ecology in the wider context of UK land use, particularly agriculture and amenity. Additionally it offers opportunities for students to understand how expertise might be used in subsequent employment and includes links with local and national, statutory and non-governmental conservation organisations. Practical skills are emphasised with local links to practical management problems on nature reserves and field work that provides experience in plant identification from a wide range of upland and lowland habitats. The experience of practitioners is utilised in a programme of visiting speakers and visits to conservation sites in a number of modules, including ACE8042 (DEFRA, Northumberland Wildlife Trust, RSPB, National Trust, English Nature) and ACE8045 (RSPB, English Nature). The project (ACE8096) is an important vehicle for allowing practical, experimental and survey skills to be applied to a specific conservation problem with possible links to a conservation organisation.

The structure provides flexibility of choice and, with the agreement of the Degree Programme Director, matches students' prior individual knowledge by offering a limited range of optional and specialist modules without forcing students to participate in modules that repeat material they have met as undergraduates. All students will be expected to take modules BIO8002 and ACE8041, unless they can demonstrate prior knowledge and skill.
The degree structure will fit within the normal modular MSc programme run by the School of Agriculture, Food and Rural Development. The 12-month course starts in mid-September, comprises 100 credits of taught modules and a conservation project (80 credits)

Programme regulations (link to on-line version)

http://www.ncl.ac.uk/regulations/programme/

13 Criteria for admission

Entry qualifications
A 2nd class degree from a UK university, or its overseas equivalent, is normally the minimum qualification for entry. Preferred first-degree subject are biology, geography or environmental science although it is expected that other relevant science and social science degrees will be acceptable. This should satisfy an expected demand from students from a wide variety of academic backgrounds.

Admissions policy/selection tools
Upon receipt of a completed application form, UK-based applicants will be invited to visit the School of Biology to meet current students and to attend an informal interview. Offers of places will be made to suitably qualified candidates and will be conditional upon a satisfactory reference and upon the applicant achieving a minimum of a 2nd class degree, if they do not hold such a degree at the time of the interview.

Non-standard Entry Requirements
Applicant who hold non-standard qualifications, and/or have relevant experience, will be considered on an individual basis.

Level of English Language capability
Applicant from whom English is not a first language must provide evidence of a satisfactory command of English, preferably by means of a TOEFL score of 600 or greater, or by an IELTS score of 7.0 or greater.

14 Support for Student Learning

Induction

During the first week of the first semester students attend an induction programme. New students will be given a general introduction to University life and the University's principle support services and general information about the School and their programme, as described in the Degree Programme Handbook. New and continuing students will be given detailed programme information and the timetable of lectures/practicals/labs/ tutorials/etc. The International Office offers an additional induction programme for overseas students.

Study skills support
Students will learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification. Some of this material, e.g. time management is covered in the appropriate Induction Programme. Students are explicitly tutored on their approach to both group and individual projects.

Numeracy support is available through Maths Aid.

Help with academic writing is available from the Writing Centre.

Academic support
The initial point of contact for a student is with a lecturer or module leader, or their tutor (see below) for more generic issues. Thereafter the Degree Programme Director or Head of School may be consulted. Issues relating to the programme may be raised at the Staff-Student Committee, and/or at the Board of Studies.

Pastoral support
All students are assigned a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees. In addition the University offers a range of support services, including one-to-one counselling and guidance or group sessions/workshops on a range of topics, such as emotional issues eg. Stress and anxiety, student finance and budgeting, disability matters etc. There is specialist support available for students with dyslexia and mental health issues. Furthermore, the Union Society operates a Student Advice Centre, which can provide advocacy and support to students on a range of topics including housing, debt, legal issues etc.

Support for students with disabilities
The University's Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with: advice about the University's facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements; a resources room with equipment and software to assist students in their studies.

Learning resources
The University's main learning resources are provided by the Robinson and Walton Libraries (for books, journals, online resources), and Information Systems and Services, which supports campus-wide computing facilities.

All new students whose first language is not English are required to take an English Language Proficiency Test. This is administered by INTO Newcastle University Centre on behalf of Newcastle University. Where appropriate, in-sessional language training can be provided. The INTO Newcastle University Centre houses a range of resources which may be particularly appropriate for those interested in an Erasmus exchange.

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

Module reviews
All modules are subject to review by questionnaires which are considered by the Board of Studies. Changes to, or the introduction of new, modules are considered at the School Teaching and Learning Committee and at the Board of Studies. Student opinion is sought at the Staff-Student Committee and/or the Board of Studies. New modules and major changes to existing modules are subject to approval by the Faculty Teaching and Learning Committee.

Programme reviews
The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to Faculty Teaching and Learning Committee.

External Examiner reports
External Examiner reports are considered by the Board of Studies. The Board responds to these reports through Faculty Teaching and Learning Committee. External Examiner reports are shared with institutional student representatives, through the Staff-Student Committee.

Student evaluations
All modules, and the degree programme, are subject to review by student questionnaires. Informal student evaluation is also obtained at the Staff-Student Committee, and the Board of Studies. The National Student Survey is sent out every year to final-year undergraduate students, and consists of a set of questions seeking the students' views on the quality of the learning and teaching in their HEIs. With reference to the outcomes of the NSS and institutional student satisfaction surveys actions are taken at all appropriate levels by the institution.

Mechanisms for gaining student feedback
Feedback is channelled via the Staff-Student Committee and the Board of Studies.

Faculty and University Review Mechanisms
The programme is subject to the University's Internal Subject Review process. Every five years degree programmes in each subject area are subject to periodic review. This involves both the detailed consideration of a range of documentation, and a two-day review visit by a review team which includes an external subject specialist in addition to University and Faculty representatives. Following the review a report is produced, which forms the basis for a decision by University Teaching and Learning Committee on whether the programmes reviewed should be re-approved for a further five year period.

16 Regulation of assessment

Pass mark
The pass mark is 50

Course requirements
Progression is subject to the University's Masters Degree Progress Regulations, Taught and Research and Examination Conventions for Taught Masters Degrees. Limited compensation up to 40 credits of the taught element and down to a mark of 40 is possible and there are reassessment opportunities, with certain restrictions.

Weighting of stages
N/A

Common Marking Scheme
The University employs a common marking scheme, which is specified in the Taught Postgraduate Examination Conventions, namely:

Summary description applicable to postgraduate Masters programmes		**Summary description applicable to postgraduate Certificate and Diploma programmes**	
<50	Fail	<50	Fail
50-59	Pass	50 or above	Pass
60-69	Pass with Merit		
70 or above	Pass with Distinction		

Role of the External Examiner

An External Examiner, a distinguished member of the subject community, is appointed by Faculty Teaching and Learning Committee, after recommendation from the Board of Studies. The External Examiner is expected to:

- See and approve examination papers
- Moderate examination and coursework marking
- Attend the Board of Examiners
- Report to the University on the standards of the programme

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

The University Prospectus (see http://www.ncl.ac.uk/postgraduate/

The School Brochure (contact enquiries@ncl.ac.uk)

The University Regulations (see http://www.ncl.ac.uk/calendar/university.regs/)

The Degree Programme Handbook

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. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.

Annex

Mapping of Intended Learning Outcomes onto Curriculum/Modules

Either

Intended Learning Outcome	Module codes (Compulsory in Bold)
A1	**ACE8045, BIO8006 ACE8041**, BIO8006, **ACE8024,** BIO8001
A2	ACE8021, **BIO8002,** ACE8017, **ACE8042,** BIO8001
A3	**BIO8027,** AES824, GSC8101, **BIO8002, ACE8041,** BIO8006, ACE8028, **ACE8024,** BIO8001, **ACE8030**
A4	**ACE8045, BIO8027, ACE8022, ACE8041,** BIO8014, ACE8028, **ACE8024,** BIO8000, BIO8001, **ACE8030**
B1	**BIO8006, BIO8027,** BIO8006
B2	**BIO8027, BIO8002**
B3	**BIO8027,** ACE8020, **BIO8002, ACE8041,** BIO8014, ACE8028, **ACE8024,** BIO8001
B4	**BIO8027, BIO8002, ACE8041,** ACE8017, **ACE8042**
C1	**BIO8027,** ACE8021, **BIO8002, ACE8041**
C2	**ACE8045, ACE8022,** ACE8020, ACE8021, **BIO8002, ACE8041,** ACE8017
C3	**ACE8045, BIO8027, ACE8022,** ACE8020, ACE8017
C4	**BIO8027,** ACE8020, **BIO8002, ACE8041,** ACE8017
D1	**ACE8045, BIO8027,** ACE8021, GSC8101, **BIO8002, ACE8041,** BIO8006, BIO8014, ACE8017, **ACE8024, ACE8042,** BIO8001
D2	**ACE8045, BIO8006, BIO8027,** ACE8021**, BIO8002,** BIO8006, ACE8028, ACE8017, **ACE8042**
D3	**ACE8045, BIO8027,** ACE8020, ACE8021, **BIO8002, ACE8041,** BIO8014, ACE8028, ACE8017, **ACE8030**
D4	**ACE8045, BIO8006, BIO8027, ACE8022,** ACE8020, ACE8021, GSC8101, **ACE8041, ACE8024, ACE8042,** BIO8006, BIO8014

Or

		Intended Learning Outcomes			
Module	**Type**	**A**	**B**	**C**	**D**
ACE8045	Compulsory	1, 4		2, 3	1, 2, 3, 4
BIO8006	Compulsory	1	1		2, 4
ACE8041	Compulsory	1, 3, 4	3, 4	1, 2, 4	1, 3, 4
ACE8024	Compulsory	1, 3, 4	3		1, 4
BIO8002	Compulsory	2, 3	1, 2, 3, 4	1, 2, 4	1, 2, 3
ACE8042	Compulsory	2	4		1, 2, 3, 4
BIO8027	Compulsory	3, 4	1, 2, 3, 4	1, 3, 4	1, 2, 3, 4
ACE8022	Compulsory	4		2, 3	4
BIO8006	Optional	1, 3, 4	1, 3		1, 2, 3, 4
BIO8001	Optional	1, 2, 3, 4	3		1
ACE8021	Optional	2		1, 2	1, 2, 3, 4
ACE8017	Optional	2	4	2, 3, 4	1, 2, 3, 4
AES824	Optional	3			
GSC8101	Optional	3			1
ACE8028	Optional	3, 4	3		2, 3
BIO8000	Optional	4			
ACE8020	Optional		3	2, 3, 4	3, 4