The Royal Geographical Society (with IBG) welcomes the opportunity to respond to the OCR consultation on a proposal for a GCSE in Natural History. The following is made as a public response.

This response has been developed in collaboration with the Society’s Education Committee which includes representation of colleagues who are head teachers, heads of school geography departments, teacher trainers and geography teachers.

General Comments:

1. The Society shares common cause with the purpose behind the proposal for a new GCSE in Natural History. It supports the aim that more young people should be offered the opportunity to engage with nature – be it within the curriculum, examination courses, the wider life of schools, in the classroom and through first-hand experience of the natural world.

2. This support has been repeatedly demonstrated through the Society’s central involvement in the recent reviews of the Geography National Curriculum, and GCSE and A Level courses in this subject. The outcomes of these reviews have ensured that geography continues to be one of the key subjects that teaches young people about the world’s physical and human landscapes, the interactions between people and the environment from the local to the global, how this brings about changes to physical systems and the challenges facing societies in addressing environmental challenges now and in the future. For example, in relation to GCSE geography specifically there is established and widespread coverage of such issues in the currently specifications. Please see Appendix 1.

3. In addition, there is widespread public support for the importance of geography in teaching about such issues. For example, YouGov polling, in 2019 and 2020, of representative samples of the UK population identified that geography GCSE (76%) and A Levels (64%) were selected by a majority of the public when they were asked which subjects taught young people about climate change. Please see Appendix 2.

4. The Society notes that geography has achieved significant increases in its GCSE entries. Numbers have risen from 180,000 in 2010 to 265,000+ in 2019. Consequently, the proportion of young people studying GCSE geography has risen from ~25% to ~44%. In addition, this subject’s growth has come disproportionately from students who were previously less likely to study geography, namely Black, Asian and minority ethnic students, those experiencing disadvantage or lower prior
attainment and those studying in comprehensive schools. In this way geography is helping to ensure that more young people, from a greater range of diverse and different backgrounds are being taught about environmental issues.

5. The Society believes that the identified purpose of offering a Natural History GCSE which “offers a unique opportunity to observe and engage with the natural world to develop a deeper understanding of the flora and fauna (life on Earth) within it” is rightly ambitious.

6. However, the Society believes that the current proposals are too broadly written and create significant and unproductive overlap with other subjects including geography (and geology and biology). As a result, the Society believes that the full value and potential of a new GCSE in Natural History is not yet fully captured in the proposals presented through the consultation.

7. With regards to subject overlap and duplication an analysis of the proposed context against the subject requirements for GCSE geography identify that there are substantial overlaps and duplication of existing ‘geographical’ GCSE content in the following sections:

- Theme 1. The natural shaping of the world. There is very strong overlap with geography across all the 7 proposed content areas
- Theme 2. Life in the early world. There is some overlap with geography in this section
- Theme 4. Human impact on the world. There is very strong overlap with geography across almost all the 14 proposed content areas

8. There are also substantial overlap and duplication between the skill proposed for Natural History and those required for GCSE geography. These include:

- Cartographic skills and use of digital methods (inc GIS). There is very strong overlap with the skills required in geography
- Data skills. There is strong overlap with geography, and likely to be very strong given that data skills will be applied to the subject content which has a strong overlap with geography.
- Research skills. There is some overlap with geography, which may be higher depending on how research skills are applied to overlapping subject content.

9. The Society feels that the core of the proposal is best demonstrated in Theme 3. Flora and fauna and that this theme should be significantly expanded, whilst the unhelpful and significant duplication of content with geography in Themes 1 and 4 is significantly reduced.

10. The Society feels that Theme 5. Our changing view of the world provides an imaginative and innovative complement to an expanded ‘core Natural History’ content of Theme 3.

11. The Society recommends that the proposal is restructured to focus the majority of the content on Theme 3, complemented by Theme 5 and elements of Theme 2.

12. The Society believes that such a refocusing would give weight and depth to a young person’s experience of Natural History and meet the ambitions that underpin this proposal. In addition, it would lead to a more focused course which young people (and parents) could view as complementing and extending study beyond geography and other GCSE subjects, rather than competing with it.
13. In addition, such refocusing would help ensure that the skills proposed for the Natural History GCSE are applied only to ‘natural history’, rather than geographical, subject content. This would significantly reduce overlap and repetition and strengthen a distinctive offer for Natural History.

14. Beyond this consultation there are also a number of significant practical considerations which will determine the future success of a Natural History GCSE. These include who will be available to teach it, what professional support would be provided to them, who will train the Natural History teachers of the future and how might this subject be timetabled within a school’s GCSE options. If the proposal moves to the next stage the Society would be pleased to contribute to further discussions on these issues.

The Royal Geographical Society (with IBG):

The Royal Geographical Society (with IBG) is the UK’s learned society and professional body for geography and geographers. The Society maintains a strong overview of the discipline, its standing and practice in schools, higher education, and the workplace. This includes the accreditation of geographers and geography programmes through the award of Chartered Geographer to individuals and the Society’s accreditation of undergraduate and Masters level geography programmes.

We advise on, and support the advancement of, geography; the dissemination of geographical knowledge to the public, policy makers and other specialist audiences including teachers, Geography ITT Scholars, and those involved in expeditions and fieldwork; and training and professional development for practising geographers. We work closely with the Department for Education, Ofqual, Ofsted, the awarding organisations, and geography teachers to support good practice in teaching and learning in geographical education.

We have 16,000 Fellows and members and our work currently reaches more than three million people per year. The Society awards the professional accreditation Chartered Geographer, which is awarded to teachers through the Chartered Geographer (Teacher) designation and accredits geography undergraduate programmes. Each year the Society works in a range of ways with teachers and pupils from about half of all English secondary schools which includes work with academies and their respective MATs, free, independent and maintained schools.

The Society provides a significant programme of activities to support teachers during their training year and entry into the profession. We work regularly with Schools Direct, Teach First and HEI ITT providers to provide subject specialist input into their secondary programmes and since 2016 the Society has been supported by the DfE to run the Geography ITT Scholarship programme, which has awarded Scholarships to over 500 ITT geographers.

Our annual programme of CPD reaches about 1,500+ teachers and the Society’s online resources via www.rgs.org/schools receive over 1.3 million views annually.
Appendix 1

GCSE Subject Content for Geography (Department for Education 2014)

The following extracts from the GCSE subject content report for geography identify where environmental issues and related content are required elements of study within current GCSE specifications in geography. The relevant requirements are highlighted.

2. GCSE specifications for the discipline of geography should provide the opportunity for students to understand more about the world, the challenges it faces and their place within it. The GCSE course will deepen understanding of geographical processes, *illuminate the impact of change and of complex people-environment interactions, highlight the dynamic links and interrelationships between places and environments at different scales*, and develop students’ competence in using a wide range of geographical investigative skills and approaches. Geography enables young people to become globally and environmentally informed and thoughtful, enquiring citizens.

3. Gain understanding of the *interactions between people and environments*, change in places and processes over space and time, and the interrelationship between geographical phenomena at different scales and in different contexts (think like a geographer)

14. Geography of the UK – Knowledge and understanding of the UK’s geography, both in overview and with some in depth study, to include its *physical and human landscapes*, *environmental challenges*, changing economy and society, the importance of cultural and political factors, and its relationships with the wider world. Much of this may be achieved by study in combination with other physical, human and *environmental study* topics,

15. Geomorphic processes and landscape – *How geomorphic processes at different scales, operating in combination with geology, climate and human activity have influenced and continue to influence the landscapes of the UK*. This should include detailed reference to at least two different and distinctive physical landscapes in the UK.

17. *Global ecosystems and biodiversity* – An overview of the distribution and characteristics of large scale natural *global ecosystems*. For two selected ecosystems, draw out the *interdependence* of climate, soil, water, plants, animals and humans; the processes and interactions that operate within them at different scales; and *issues related to biodiversity and to their sustainable use and management*

18. Resources and their management – An overview of how humans use, *modify and change ecosystems and environments in order to obtain food, energy and water resources*. Detailed study of *one of either food, energy or water*, recognising the changing characteristics and distribution of demand and supply, past and present impacts of human intervention, and issues related to their *sustainable use* and management at a variety of scales.

GCSE Geography Appendix: Use of mathematics and statistics in geography

The following should all be covered in any specification

- Cartographic skills: interpret cross sections and transects; describe and interpret geo-spatial data presented in a GIS framework
- Graphical skills: select and construct appropriate graphs and charts to present data; interpret and extract information from different types of graphs and charts; interpret population pyramids, choropleth maps and flow-line maps
- Numerical skills: demonstrate an understanding of number, area and scale and relationships between units; design fieldwork data collection sheets and collect data with an understanding of
accuracy; sample size and procedures, control groups and reliability; understand and correctly use proportion and ratio, magnitude and frequency; draw informed conclusions from numerical data

- Statistical skills: use appropriate measures of central tendency, spread and cumulative frequency; calculate percentage increase or decrease and understand the use of percentiles; describe relationships in bivariate data: sketch trend lines through scatter plots; draw estimated lines of best fit; make predictions; interpolate and extrapolate trends; be able to identify weaknesses in selective statistical presentation of data

Appendix 2