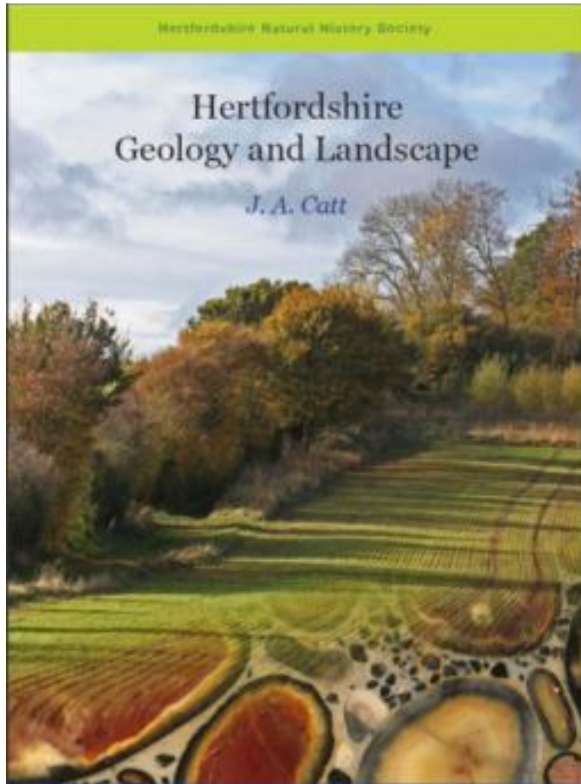


# HERTFORDSHIRE GEOLOGY AND LANDSCAPE

## Book review

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'Hertfordshire Geology and Landscape' is the most important book ever written on the county's Earth heritage. Running to 373 pages, it is an elegantly redacted summary of what is known to date about Hertfordshire's geology and physical landscape, presented in attractive hardback format. This book is a testament to John Catt's editorial and writing skills as well as his deep personal knowledge of Hertfordshire's geology and soils. As the Preface explains, it is also a testament to his determination to see Percy and Enid Evans' original idea of a book 'designed for naturalists who are not geologists' brought to completion. He has achieved this through a multidisciplinary team of 14 contributory authors.

With few exceptions, 'Hertfordshire Geology and Landscape' has successfully ridden a narrow line between scientific detail and interpretive generality. With an eye to non-specialist readers, the elements of geology have been briefly but succinctly explained in the Introduction, so leaving plenty of space for the systematic recapitulation of the county's geological history which follows, and which occupies almost half of the book. Chapter 2 deals with the concealed bedrock geology, known from borehole data and remote sensing techniques, and also the earliest bedrock strata outcropping in the county. Chapter 3 is devoted to the Chalk, and includes much information which will be useful in adjacent counties. The Palaeogene is considered in Chapter 4, including a valuable summary on what is known about Hertfordshire Puddingstone and allied silcretes, one of the county's star geological features. The strengths of Chapters 5 and 6 lie in the way they present geological information on landscape development in the Neogene and Quaternary periods. Readers are effectively initiated into the complex origins of today's landscape through a number of key themes, including the erosion surfaces and drainage network of the Chilterns, the influence of buried structural features, the story of the proto-Thames and its suite of river terraces, and the profound impact of the Anglian glaciation; there are interesting subsidiary themes on Devensian periglacial features and the cultural use of puddingstone and sarsenstone. Notably, this book is likely to become a nationally important reference on the subject of Neogene landscape development.

Chapters 7 to 10 explore the links between geology and other aspects of the natural environment. Soils and their links with ecology and agriculture are dealt with in chapter 7, prehistoric archaeology and human settlement in chapter 8, and hydrogeology in chapter 9. In places, most notably where hydrogeology is concerned, the editor has clearly had a difficult task to decide how far he should inform the reader about unfamiliar science. Although the theory of porosity, permeability, specific yield, storativity and hydraulic gradient are outside most people's knowledge base, such explicative detail could probably have been left out of the book without detracting from subsequent discussion of the important water-related themes in this water-starved county: over-abstraction and pollution of ground-water, surface flow regimes, land-slides and subsidence. Too few people appreciate the geological realities behind the water in their tap and the ground they stand on. The final chapter, 10, brings geology into the everyday world as reflected in the built environment, the county's mineral resources and their use in buildings. This is the part of the book with the highest density of photographs, and brings the subject alive in an engaging way. The book is rounded off with 35 pages of references and a 12-page index.

As a final comment, 'Hertfordshire Geology and Landscape' will surely make an important contribution to explaining, promoting and conserving the county's Earth heritage for many years to come. It will complement 'A Geological Conservation Strategy for Hertfordshire', published by the Herts RIGS Group in 2003. Its multidisciplinary approach will assist partnership work between heritage interest groups in the county. At a cover price of £39.50 it represents good value for money, and deserves to find a permanent place on the shelf of anyone interested in understanding Hertfordshire's natural and cultural environment.

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Tim Holt-Wilson  
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