Geology of the Andover area: Introduction

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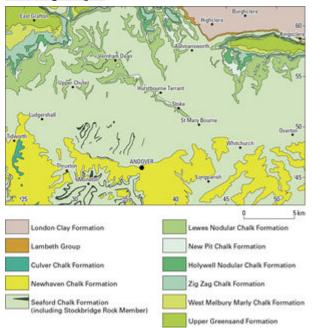
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This page is part of a category of pages providing a summary of the geology of the Andover district (British Geological Survey Sheet 283), which extends over approximately 600 km² of north-west Hampshire and a small part of eastern Wiltshire.

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Andover district and bedrock geology. P807819.

Introduction

Period	Epoch	Lithostrat	tigraphic units		Thickness (m)	Age* (Ma)	Major events
QUATERNARY	PLEISTOCENETO			Head Gravelly head Head gravel Older head Clay-with-flints Peat Alluvium River terrace deposits	1-10	-26	Alterations of interglacial and glacial events. Wide fluctuation of relative sea level Major unconformity time gap o about 40 Ma after the main Alpine Orogeny about 20–25 M Major inversion of structures
PALAE-	PALEOCENE TO EOCENE	THAMES GROUP	LONDON CLAY FORMATION		up to 100		Marine transgression
		LAMBETH GROUP	READING FORMATION		25-30		Major unconformity time gap about 15 Ma
JURASSIC CRETACEOUS	LATE	WHITE CHALK SUBGROUP	CULVER CHALK FM NEWHAVEN CK FM SEAFORD CHALK FM LEWES NODULAR CHALK FM NEW PIT CHALK FM HOLYWELL NODULAR CHALK FM	~~~~~	up to 15 up to 70 60-70 45-75 20-30	- 65.5 - 99.6	Uplift and minor inversion of structures Most of Europe submerged
		GREY	ZIG ZAG CHALK FM		30-50		
		CHALK SUBGROUP	WEST MELBURY MARLY CHALK FORMATION		15-20		North Atlantic continues to ope North Sea and Wessex basins
			UPPER GREENSAND FM GAULT FORMATION		40-70 40-85		joined
	LATE EARLY	LOWER GREENSAND GROUP	UNDIVIDED		up to 12		Marine transgression and regional downwarping, Initial opening of North Atlantic
		WEALDEN GROUP	UNDIVIDED		up to 350	-c.143 -c.161	Short-lived but widespread unconformity Active block faulting
		PURBECK GROUP	DURLSTON FM LULWORTH FM		35-60		London Platform uplifted Regression
		PORTLAND GROUP	PORTLAND STONE FM WARDOUR FORMATION		45-60		•
		1	KIMMERIDGE CLAY FM		183-273		Maximum Jurassic marine transgression
	MIDDLE	CORALLIAN GROUP			42-51		-
			OXFORD CLAY FM KELLAWAYS FM		100-300		Downwarping
		GREAT OOLITE GROUP INFERIOR OOLITE GROUP			up to 200		Uplift shallow-water carbonate:
	EARLY	LIAS GROUP			60-650	- 176.0	Renewed extension
PERMIAN? TO TRIASSIC		PENARTH GROUP MERCIA MDST GP SHERWOOD SST GROUP PERMAN STRATA		MIE GDOLID	up to 20 up to 270 up to 230	- 201.6	Marine transgression Initial extensions of Wessex Basin. Major unconformity about 300 Ma
CARBON: CARBON: FEROUS	~~	CARBONIFEROUS DEVONIAN, SILURIAN, ORDOVICIAN,	+ ? AYLESBEARE MUDST		unknown	- c.245	Major Variscan folding Variscan Orogeny

*Timescale from Gradstein et al., 2004. Modified by Walker et al., 2009

P807823

This Sheet Explanation provides a summary of the geology of the Andover district (Sheet 283), which extends over approximately 600 km² of north-west Hampshire and a small part of eastern Wiltshire **Figure P807819**. The district covers an area from the A338, through Tidworth, in the west, to Overton and Kingsclere in the east. The district is traversed by major roads with the north-south A34 and the east-west A303 connecting the area to Newbury, Winchester, Basingstoke and Salisbury (see also **Jukes-Browne**, **1908**)^[1].

The small market town of Andover, that developed significantly as an overspill for London in the 1950s, 60s, 70s and 80s, is the only urban area within the district and has a population of around 52 000. The town is the home of Defence Logistic Organisation and the Headquarters of Land Forces but also has a considerable light industry. Elsewhere the district is rural with arable farming and forestry being the principal industries.

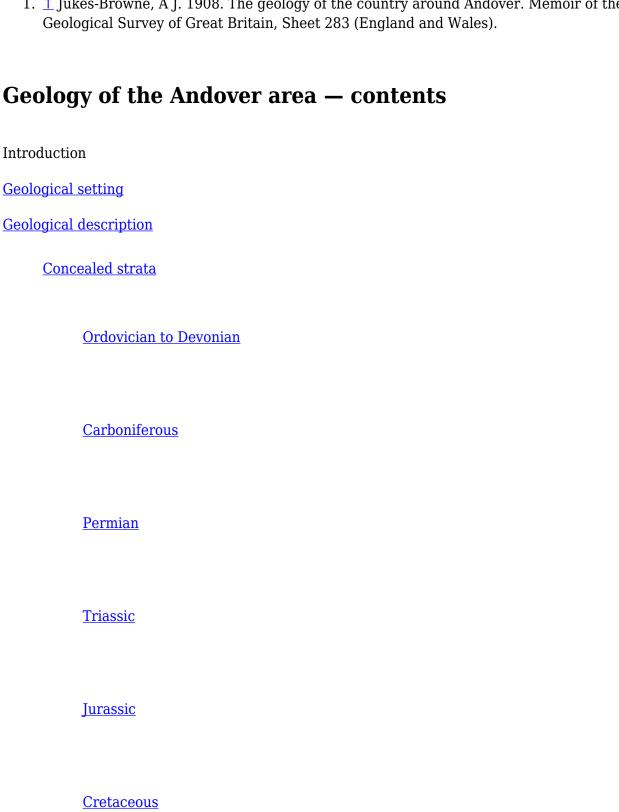
The Andover district is founded for the greater part on Cretaceous strata; the area is characterised by broad gently dipping slopes and short, steep scarps which are cut by the valleys of the River Test and its tributaries.

Geological succession

Summary of the geological succession in the Andover area

References

1. 1 Jukes-Browne, A.J. 1908. The geology of the country around Andover. Memoir of the Geological Survey of Great Britain, Sheet 283 (England and Wales).



Upper Greensand Formation (UGS) Chalk Group Palaeogene Quaternary **Artificial ground** Applied geology **Hydrogeology Bulk minerals** Geotechnical considerations and hazards **Information resources References** Retrieved from <u>3</u>′ **Category**: • Andover - the geology of the area

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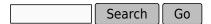
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