

---

# Gedgrave Hall, Gedgrave, Suffolk

[TM 4053 4859]

## Highlights

The pits at Gedgrave Hall are of great historical importance in that they have been interpreted as the type locality for Harmer's Gedgravian Stage and are also of great importance in work on Coralline Crag facies distributions.

## Introduction

The old quarries at Gedgrave Hall have been known since at least 1871 and were described in detail by Burrows (1895a,b). Harmer (1900a), in attempts to correlate the Coralline Crag with Neogene stages on the continent, proposed a new stage, the 'Gedgravian', which was to be synonymous with the Coralline Crag in Suffolk. Harmer took the name from the parish of Gedgrave where the Coralline Crag was well exposed at the time. Later authors interpreted the pits at Gedgrave Hall to represent the type locality for Harmer's Gedgravian Stage (e.g. Boswell, 1938; Ovey and Pitcher, 1948).

## Description

Two pits exist at Gedgrave Hall at the present time. The more northern pit showed a section of about 20 feet (6 m) in 1894 (Burrows, 1895a,b). A section of about 5 m of cross-stratified Coralline Crag was still visible in 1978 but since that time the pit has degraded considerably so that now only 2.3 m of Coralline Crag can be seen in an exposure about 10 m wide. The exposure shows cross-bedded sands of the Sudbourne Member with a maximum set thickness of about 1 m. The foresets dip steeply towards the south-south-west, which is comparable to the dip directions observed at other localities in this facies. The Coralline Crag sediment has been selectively leached of aragonitic material and now consists largely of highly comminuted and abraded calcitic shell material.

The second pit, a few metres to the south and slightly downslope, shows only a small exposure about 1.5 m wide of about 40 cm of unleached Crag at the present time. Poorly defined cross-bedding can be seen. Although only a small exposure presently exists, it is notable for the abundance of small species of aragonitic molluscs, particularly fragile valves of *Ensis*. A fairly rich bryozoan fauna is also present consisting mainly of *Turbicellepora* and *Metrarabdotos monilifera*. The fauna is thus in marked contrast to the northern pit which lies at about a 1 m greater elevation. Burrows (1895a,b), in a study of foraminifera from this locality had noted a difference between the two pits and assigned the sediments of the lower pit to zone 'f' of Prestwich (1871a), and the uppermost pit he assigned largely to Prestwich's zone 'g' which is equivalent to the Sudbourne Member. The contact between the two units is not exposed at the present time. The lower pit is the type locality for the foraminiferid *Alliatinella gedgravensis* (Carter, 1957).

A nearby borehole [TM 4036 4869] a little upslope from the northern pit penetrated 10.6 m of Coralline Crag and reached the London Clay surface at -5.6 m OD (Balson *et al.*, 1993).

## Interpretation and evaluation

This is one of the most southerly exposures in the Sudbourne Member and skeletal material derived from the north has therefore suffered longer transportation and abrasion than at other localities. The lack of identifiable macrofauna is thus thought to be mainly due to the effects of prolonged transportation, although occasional abraded bryozoans and *Aequipecten* are found.

Taken together, the two pits at Gedgrave Hall provide an important section in the study of Coralline Crag stratigraphy. The northern pit shows a section in the Sudbourne Member that is near the southern limit of its main outcrop. The shelly

sand is more comminuted at this locality than at localities further north and identifiable macrofauna is relatively scarce. The southern pit exposes sediments which probably lie only a little above the underlying Ramsholt Member and contain an aragonitic shell fauna which contrasts with that at The Cliff, Gedgrave, about 1 km to the west.

## **Conclusions**

Although Harmer did not specifically identify the pits at Gedgrave Hall as type sections of the Gedgravian Stage, this was the interpretation placed on them by later authors. The site is therefore worthy of preservation as a possible type locality for this stratigraphical interval. If re-excavated, it would provide an excellent section to examine the nature of the contact between the Sudbourne and Ramsholt Members of the Coralline Crag.

## **[References](#)**