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Macrofossils from the Upper Greensand and Chalk Group of Sheet 281 (Frome), 282 (Devizes) and 298 (Salisbury)

Integrated Geosurveys (Southern England) Programme

Internal Report IR/04/149

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INTEGRATED GEOSURVEYS (SOUTHERN ENGLAND) PROGRAMME

INTERNAL REPORT IR/04/149

Macrofossils from the Upper Greensand and Chalk Group of Sheet 281 (Frome), 282 (Devizes) and 298 (Salisbury)

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Foreword

This report details Chalk Group macrofossils from 184 localities in the Frome (Sheet 281) and Devizes (Sheet 282) districts. With the notable exception of Westbury Quarry (Beggar's Knoll), nearly all of the localities are within the Salisbury Plain military ranges, and can only be accessed with the express permission of the military authorities.

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Summary

This report describes the Middle and Late Cretaceous stratigraphy at 170 localities in the Frome (Sheet 281), Devizes (Sheet 282) and Salisbury (Sheet 298) districts based on fossil collections and field observations. Nearly all of the localities fall within the Salisbury Plain military ranges, an area that has not previously been available for detailed geological investigation. Seven formations are recognised in the Chalk Group within the region covered by this report: West Melbury Marly Chalk Formation, Zig Zag Chalk Formation, Holywell Nodular Chalk Formation, New Pit Chalk Formation, Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation. The large quarry at Beggar's Knoll, near Westbury ('Westbury Quarry' herein), provides a key exposure of four of these formations, from the lower part of the Zig Zag Chalk to the base of the Lewes Nodular Chalk. A single locality within the Upper Greensand Formation is also described.

1 Introduction

In the following account, the key macrofossils and stratigraphical conclusions are detailed for 182 Chalk Group localities and two Upper Greensand localities. The material was collected from the Frome (Sheet 281), Devizes (Sheet 282) and Salisbury (Sheet 298) districts by MAW, P M Hopson, A R Farrant, K A Booth and A. Newell in Spring and Summer 2004. Many localities fall within the military ranges on Salisbury Plain, and under no account should these be visited without first obtaining permission from the relevant military authorities.

The stratigraphy referred to in this report is summarised on Table 1.

2 Stratigraphy

(1) Westbury (Beggars Knoll) Quarry, 1.8 km at 115° from church at Westbury, Wiltshire.

1:50 000: 281 (Frome)

NGR: ST 8890 5054

Specimen nos: WMD 9494-9525 BGS photograph nos: PS77248-261

Material was collected from six sections (numbered 1 to 6; Fig. 1) exposed in the quarry. Section 2 duplicates Section 5, and is not described further herein.

The succession currently exposed in the quarry ranges from the lower part of the Zig Zag Chalk Formation, at the base, to the lower part of the Lewes Nodular Chalk Formation at the top. These formations, as developed in the quarry, are described in turn below.

Zig Zag Chalk Formation (c. 17 m): The lowest part of this formation is seen in Section 4, and comprises 4.5 m of conspicuous marl / limestone rhythms. Assignment to the Zig Zag Chalk rather than the similarly rhythmic West Melbury Marly Chalk is based on fossil evidence, which includes the ammonite *Acanthoceras jukesbrownei*, indicative of the upper Middle Cenomanian *jukesbrownei* Zone. The in-situ fauna is characterised by the bivalve *Inoceramus pictus*, which does not range below the base of the *jukesbrownei* Zone. A loose fauna collected below Section 4 also includes the ammonites *Thomelites sornayi* and *Calycoceras (Newboldiceras) asiaticum spinosum*, the former indicative of the Upper Cenomanian *C. guerangeri* Zone (Wright & Kennedy, 1990).

A notable feature of Section 4 is a limestone (Limestone 2 of Fig. 1) containing small glauconitic and phosphatic clasts.

The higher part of the Zig Zag Chalk Formation is seen in Section 3. This comprises c. 12.5 m of rather featureless pale grey weathering chalk, lacking any conspicuous marl / limestone rhythms. The basal 3 m interval is distinctly bluish-grey weathering, and there are scattered occurrences of marcasite nodules through the higher part of the succession. The interval contains sporadic records of the bivalve *Inoceramus pictus* and thin-tested echinoids, and is presumed to belong to the *C. guerangeri* Zone.

When viewed from a distance under favourable illumination, some quarry faces in the higher part of the Zig Zag Chalk show a subtle rhythmicity, formed by more resistant weathering units. One of the images on Fig. 1 shows weakly developed rhythms in the higher part of the Zig Zag Chalk, arranged into three groups.

Holywell Nodular Chalk Formation (c. 21.5 m): The Plenus Marls, comprising the basal c. 2.1 m of the formation, form a conspicuous greenish-grey weathering interval in the quarry. Most of

Jefferies (1963) eight bed subdivisions can be determined, especially bed 6, a thin, black horizon. The Melbourn Rock, immediately above the Plenus Marls, is equally conspicuous forming a strongly cemented interval a little under a metre in thickness. The lower part of the formation is strongly nodular with common plexus marls. In the middle part of the formation there are groups of thick plexus marls in nodular and shell-rich chalk. The higher part of the formation is less obviously nodular, but shell fragments are a persistent feature. Most of the shell comprises the fragmental remains of the inoceramid bivalve *Mytiloides*, which enters the succession within 1.5 m of the top of the Melbourn Rock, showing that the Upper Cenomanian part of the Holywell Nodular Chalk is relatively condensed at Westbury compared to stratotype successions in Sussex. The top of the Holywell Nodular Chalk is marked by a 70 mm thick plexus marl, overlain by small finger-like flints. The marl marks the upward limit of nodular and *Mytiloides*-rich chalk, and is the inferred correlative of the Gun Gardens Main Marl of Mortimore (1986) and Lulworth Marl of Gale (1996). The small flints are equated with the Glyndebourne Flints (Mortimore & Pomerol, 1987, Fig. 4b) by R N Mortimore (*pers. comm.*, August 2004).

New Pit Chalk Formation (c. 17 m): At Westbury, this formation is generally more indurated, with fewer well developed marl seams than is typical. The chalk is generally smooth-textured and non-nodular; thin marls occur in the lower part and bands of nodular flint and occasional thicker marls occur higher up. *Mytiloides* ex gr. *hercynicus-subhercynicus* occurs within 3 m of the inferred Gun Gardens Main / Lulworth Marl, confirming the presence of the lower part of the New Pit Chalk Formation. Large terebratulid brachiopods, probably belonging to *Concinnithyris*, also occur at this level. The fauna from the higher part of the New Pit Chalk is dominated by the inoceramid bivalve *Inoceramus cuvieri*, suggesting the equivalent of the higher part of the New Pit Chalk Formation. The ammonite *Lewesiceras* was collected from near the top of the formation. A conspicuous 150 mm thick marl seam, marks the upward change to hard, nodular chalk, indicative of the overlying Lewes Nodular Chalk Formation.

Lewes Nodular Chalk Formation (c. 5.5 m): Hard, nodular chalk, with strongly glauconitised and iron-stained hardgrounds is characteristic of the few metres of Lewes Nodular Chalk exposed at Westbury. At least two strongly indurated hardground intervals occur at Westbury, underlain by c. 3 m of hard, nodular chalk containing *Inoceramus cuvieri*. The hardgrounds represent the lower part of the Chalk Rock, the traditional marker for the base of the 'Upper Chalk'.

Discussion

A detailed lithological log of the Westbury Quarry, covering the Holywell, New Pit and basal Lewes Nodular Chalk formations, was published by Gale (1996). Gale's thickness for the Holywell Nodular Chalk (c. 21.5 m - excluding Plenus Marls) is slightly greater than determined in this study, but the thicknesses of the New Pit Chalk (c. 16.5 m) and the stratal equivalent of the Lewes Nodular Chalk (c. 7.5 m) are in close agreement.

In the interpretation of the Westbury succession given by Gale (1996), the marl at the top of the New Pit Chalk Formation (Marl 1 of Fig. 1) is equated with the Round Down Marl (= Malling Street Marl of Mortimore, 1986). If this correlation is correct, then the whole of the upper part of the New Pit Chalk (containing the New Pit Marls and Glynde Marls) is missing at Westbury. However, the relative abundance of *Inoceramus cuvieri* in the higher part of the New Pit Chalk succession at Westbury is more typical of the interval containing the New Pit and Glynde Marls, and may indicate that the whole of the New Pit Chalk is represented in a condensed form at Westbury.

According to Gale (1996), the lowest hardground interval in the base of the Lewes Nodular Chalk at Westbury represents at least the Ogbourne and Pewsey hardgrounds. Bromley & Gale (1982) show that the Fognam Farm and Leigh Hill hardgrounds are also represented in this lower bed, the highest hardground interval at Westbury representing the Hitch Wood Hardground. Detailed examination of the lower hardground interval in this study showed the presence of at

least four glauconitised surfaces. The upper hardground interval was inaccessible, but Bromley & Gale (1982) show that it is overlain by a small nodular flint, a feature of the Hitch Wood Hardground seen at (26) (below).

Conclusion: Zig Zag Chalk Formation, Holywell Nodular Chalk Formation, New Pit Chalk Formation & basal Lewes Nodular Chalk Formation; Cenomanian, Turonian; *A. jukesbrownei* Zone, *C. guerangeri* Zone, *M. geslinianum* Zone, *Mytiloides* spp. Zone, *T. lata* Zone, basal *S. plana* Zone.

(2) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 300 m at 097° from East Hill Farm, north of Heytesbury, Wiltshire.

1:50 000: 281 (Frome)

NGR: ST 9372 4418

Specimen nos: WMD 9526-9540 BGS photograph nos: PS77268; PS77274-275

The section exposes 1.2 m of Zig Zag Chalk Formation, overlain by 0.9 m of Plenus Marls Member (basal Holywell Nodular Chalk Formation). At the eastern end of the section the outcrop of the Plenus Marls is truncated by a fault of unknown displacement.

The brachiopod *Terebratulina nodulosa* was found in the Zig Zag Chalk. The fauna from the Plenus Marls includes a macroconch of the ammonite *Calycoceras* (*C.*) *naviculare*, the brachiopod *Orbirhynchia multicostata* and large specimens of the oyster *Pycnodonte vesiculare*, all typical of this horizon. The Plenus Marls belong to the *M. geslinianum* Zone, and the underlying Zig Zag Chalk can be inferred to represent the *C. guerangeri* Zone.

Conclusion: Topmost Zig Zag Chalk Formation & basal Holywell Nodular Chalk Formation; Upper Cenomanian, *C. guerangeri* Zone & *M. geslinianum* Zone.

(3) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 1 km at 339° from Willis's Field Barn, NNE of Knook, Wilts.

1:50 000 281 (Frome)

NGR: ST 9436 4450

Specimen nos: WMD 9543-9546

The material was collected from brush of hard, nodular chalk covering a degraded section. The fauna comprises the gastropod *Bathrotomaria perspectiva*, the inoceramid bivalve *Mytiloides labiatoidiformis?* and fragments of the echinoid *Echinocorys*.

The fauna strongly suggests the middle part of the *P. (S.) plana* Zone, from which the lower part of the Lewes Nodular Chalk Formation might be inferred. *Bathrotomaria perspectiva* is typical of the fauna associated with the Hitch Wood Hardground, at the top of the 'Chalk Rock', although Mortimore (1986) shows that this gastropod is generally distributed through most of the *plana* Zone and the topmost *lata* Zone. *M. labiatoidiformis* does not range below the middle of the *plana* Zone (Mortimore, 1986).

Conclusion: lower Lewes Nodular Chalk Formation; upper Turonian, *P. (S.) plana* Zone.

(4) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 1 km at 356° from Willis's Field Barn, NNE of Knook, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9462 4462

Specimen no.: WMD 9547

The specimen is the inoceramid bivalve *Inoceramus* ex gr. *lamarcki*, in hard, nodular chalk.

Field relations suggest that the section is likely to be in the higher part of the Lewes Nodular Chalk, and this is not inconsistent with the record of *I.* ex gr. *lamarcki*, although the species group is quite long-ranging.

Conclusion: ? upper Lewes Nodular Chalk Formation.

(5) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 950 m at 312° from Quebec Farm, NE of Knook, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9510 4450 to 9518 4420

Specimen nos: WMD 9548-9550

The fauna comprises shell fragments of the inoceramid bivalve *Platyceramus*, and a sponge.

The proximity of this locality to probable Lewes Nodular Chalk at (4) (above) suggests assignment to the lower *M. coranguinum* Zone, although *Platyceramus* can also occur at younger horizons. The lower part of the Seaford Chalk Formation might be inferred.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(6) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route on Breakheart Hill, c. 1.1 km at 061° from Quebec Farm, NE of Knook, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9724 4490

Specimen nos: WMD 9551-9555

The fauna includes the inoceramid bivalves *Platyceramus* and ?*Volvicceramus involutus*, suggesting assignment to the lower *M. coranguinum* Zone, and by inference, the lower Seaford Chalk Formation.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(7) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route in Breakheart Bottom, c. 1.2 km at 308° from Manor Farm, Chitterne, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9786 4504 to 9818 4510

Specimen nos: WMD 9556-9566

The material includes very thick shelled fragments of the inoceramid bivalve *Platyceramus*, and a right valve fragment of *Volvicceramus involutus*. This fauna is indicative of the lower part of the Seaford Chalk Formation (Belle Tout Beds).

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(8) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 1.3 km at 024° from Manor Farm, Chitterne, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9904 4528 to 9996 4570

Specimen nos: WMD 9567-9580

The fauna includes very thick shell fragments of *Platyceramus*, and right and left valve fragments of *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(9) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 450 m at 022° from East Hill Farm, NE of Heytesbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 9358 4462

Specimen nos: WMD 9581-9584 BGS photograph no.: PS77266

Specimens of *Inoceramus cuvieri* were collected from a c. 2.5 m section of firm to hard chalk with marl horizons. *I. cuvieri* is typical of the upper *T. lata* Zone, occurring in the higher part of the New Pit Chalk and the lower part of the Lewes Nodular Chalk. Although the chalk exposed at this locality is much harder than typical New Pit Chalk, there is no evidence of the conspicuous nodularity that marks the base of the Lewes Nodular Chalk at Westbury. The section is therefore presumed to represent the higher part of the New Pit Chalk Formation.

Conclusion: upper New Pit Chalk Formation; Turonian, upper *T. lata* Zone.

(10) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 650 m at 013° from East Hill Farm, NE of Heytesbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 9360 4496 to 9354 4474

Specimen nos: WMD 9585-9591 BGS photograph no.: PS77265

The fauna was collected from a c. 9 m section, comprising hard, nodular, shell-rich chalk in the lower part, overlain by smoother-textured, non-nodular chalk with a medium to large nodular flint c. 1.5 m below the top of the section (Fig. 2). The junction of these contrasting lithologies is marked by a marl seam.

The fauna from the lower, nodular interval, comprises shell fragments of *Mytiloides*, including *M. mytiloides*. The higher part of the section contains *Mytiloides* ex gr. *hercynicus-subhercynicus*, a large terebratulid brachiopod, and the ammonite *Collignonicerus*?

The fauna shows that the marl seam that separates the different chalk lithologies in the section is the likely correlative of the Gun Gardens Main Marl / Lulworth Marl, which marks the junction of the Holywell Nodular Chalk and New Pit Chalk formations.

Conclusion: upper Holywell Nodular Chalk Formation & basal New Pit Chalk Formation; Turonian, upper *Mytiloides* spp. Zone and basal *T. lata* Zone.

(11) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 600 m at 030° from West Hill Farm, north of Heytesbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 9316 4494 to 9346 4500

Specimen no.: WMD 9592 BGS photograph no.: PS77264

The section exposes up to 2 m of hard, nodular chalk with common shell fragments of *Mytiloides*.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(12) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 600 m at 343° from West Hill Farm, north of Heytesbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 9246 4510 to 9302 4494

Specimen nos: WMD 9593-9596 BGS photograph nos: PS77263

The section exposes up to 1.2 m of marly chalk, overlain by 5.7 m of hard, nodular chalk. The lowest 0.7 m of succession immediately above the marly chalk is very strongly indurated (Fig. 3).

The fauna comprises shell fragments of *Mytiloides*, collected from near the top of the section. The marly chalk at the base of the section is presumed to be the Plenus Marls, immediately overlain by the Melbourn Rock.

Conclusion: basal Holywell Nodular Chalk Formation; Upper Cenomanian & lower Turonian, *M. geslinianum* Zone, *N. juddii* Zone & *Mytiloides* spp. Zone.

(13) Salisbury Plain Military Range. Outcrop adjacent to Southern Transit Route, c. 500 m at 055° from Triangulation Point on summit of Battlesbury Hill, near Warminster, Wilts.

1:50 000 281 (Frome)

NGR: ST 9030 4583

Specimen nos: WMD 9597-9602

The section comprises c. 1.5 m of marly chalk, marl and limestone. The fauna includes the bivalves *Inoceramus pictus*, *Pycnodonte vesiculare* and ?*Amphidonte*. A fragment of an ammonite might represent *Thomelites*. The lithology and fauna suggest assignment to a level near the top of the lower (rhythmically bedded) part of the Zig Zag Chalk Formation, possibly basal *C. guerangeri* Zone.

Conclusion: Zig Zag Chalk Formation; ? basal Upper Cenomanian, ? basal *C. guerangeri* Zone.

(14) Exposure in side of footpath to Great Cheverell Hill, c. 950 m at 065° from Cheverell Hill Farm, SW of Great Cheverell, Wilts.

NGR: ^(a) ST 98013 53130 & ^(b) ST 98008 53131

Specimen nos: WMD 9603-9618 ((a) above)

WMD 9619 ((b) above)

The fauna was collected from a rhythmically bedded marl / limestone succession. The fauna at (a) (above) includes the bivalves *Inoceramus schoendorfi* (common), *Oxytoma seminudum* and *Aequipecten arlesiensis*, and is indicative of the *C. inerme* Zone and topmost West Melbury Marly Chalk Formation. The specimen collected at (b) (above) is the ammonite *Acanthoceras rhotomagense*, the index of the *rhotomagense* Zone which first appears in the topmost part of the West Melbury Marly Chalk, and more generally characterises the lower part of the Zig Zag Chalk Formation.

Conclusion: Junction of West Melbury Marly Chalk and Zig Zag Chalk formations; Middle Cenomanian, *C. inerme* Zone & *A. rhotomagense* Zone.

(15) Exposures at demolition site on Salisbury Plain Military Range, c. 2.5 km at 250° from Widdington Farm, SW of Upavon, Wilts.

1:50 000 282 (Devizes)

NGR: SU 10182 53105 & SU 10192 53131

Specimen nos: WMD 9620-9631

The fauna from the two localities collected hereabouts comprises the inoceramid bivalve *Mytiloides* ex gr. *hercynicus-subhercynicus*, indicative of the lower *T. lata* Zone, and by inference, the lower part of the New Pit Chalk Formation.

Conclusion: lower New Pit Chalk Formation; Turonian, lower *T. lata* Zone.

(16) Old quarry, 1.8 km at 120° from Urchfont Hill, SE of Urchfont, Wilts.

1:50 000 282 (Devizes)

NGR: SU 06622 54690

Specimen nos: WMD 9632-9638

The fauna is from an overgrown quarry, patchily exposing hard, nodular, flinty chalk. A sponge-rich hardground occurs near the top of the quarry.

The specimens comprise the bivalve *Cremnoceramus* ex gr. *waltersdorfensis* and the echinoids *Sternotaxis?* and *Micraster* sp. . The *Micraster* possesses 'inflated' ambulacra, which combined with the record of *C. ex gr. waltersdorfensis*, suggests assignment to the highest part of the *P. (S.) plana* Zone or lower *M. cortestudinarium* Zone (below the level of the Hope Gap Hardground). The middle or lower part of the upper Lewes Nodular Chalk Formation might be inferred.

Conclusion: middle or basal upper Lewes Nodular Chalk Formation; uppermost Turonian or lower Coniacian, uppermost *P. (S.) plana* Zone or basal *M. cortestudinarium* Zone.

(17) Old quarry at edge of Redhorn Plantation, below Redhorn Hill, SE of Urchfont, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0588 5592

Specimen nos: WMD 9639-9643 BGS photograph no.: PS77269

The quarry exposes 0.4 m of soft, grey, marly chalk, overlain by 2.4 m of very hard, nodular chalk with marl seams (Fig. 4). Specimens from the highest 1.3 m of section include the echinoid *Hemiaster minimus* and the bivalves *Inoceramus pictus* and *Mytiloides* sp.

The marly chalk at the base of the section represents the uppermost part of the Plenus Marls Member (= *M. geslinianum* Zone), at the base of the Holywell Nodular Chalk Formation, immediately overlain by the intensely hard chalk of the Melbourn Rock. The fauna from the higher part of the section spans the Cenomanian / Turonian boundary, *I. pictus* belonging to the latest Cenomanian *N. juddii* Zone and *Mytiloides* representing the lower Turonian *Mytiloides* spp. Zone.

Conclusion: basal Holywell Nodular Chalk Formation; Upper Cenomanian & lower Turonian, *M. geslinianum* Zone, *N. juddii* Zone & *Mytiloides* spp. Zone.

(18) Old chalk pit, 1.35 km at 198° from Glebe Farm, near Stockton, Wilts.

1:50 000 298 (Salisbury)

NGR: ST 98088 36894

Specimen nos: WMD 9644-9655 BGS photograph nos: PS77235-237

The fauna was collected from a c. 6 m section of hard, nodular, flinty chalk with thin marls (Fig. 5). A weakly developed hardground occurs in the lower part of the section, and a well-developed hardground occurs in the upper part of the section.

The specimens include the echinoids *Echinocorys* aff. *gravesi*, *Micraster normanniae* and *Plesiocorys placenta*, the latter associated with the hardground towards the top of the section. This fauna is indicative of the post 'Chalk Rock' succession of the *P. (S.) plana* Zone, in the middle part of the Lewes Nodular Chalk Formation. The Chalk Rock occurs in an old quarry 150 m further north [ST 9820 3705], at a slightly lower stratigraphical level.

Conclusion: middle Lewes Nodular Chalk Formation; upper Turonian, middle *P. (S.) plana* Zone.

(19) Old chalk pit c. 900 m at 086° from Baverstock Manor, Baverstock, Wilts.

1:50 000 298 (Salisbury)

NGR: SU 0376 3226

Specimen nos: WMD 9658-9668 BGS photograph nos: PS77245-246

The fauna was collected from a c. 17 m section of steeply dipping, patchily exposed hard, nodular chalk, with a thin interval of locally softer, non-nodular chalk at the base (Fig. 6). A series of mineralised hardgrounds and at least 2 conspicuous marls occur in the section.

The bivalve *Inoceramus cuvieri* is locally abundant in the lower part of the section, below the lowest hardground; occurrences at the base of the section, in non-nodular chalk, may belong to the topmost part of the New Pit Chalk Formation. The hardgrounds are inferred to represent the Chalk Rock, with the upper of the two marls depicted on Fig. 6 probably representing the Fognam Marl. The fauna from the highest 7 m of section (not logged in detail on Fig. 6) includes the brachiopod *Gibbithyris*, the bivalve *Cremonoceras?* and the echinoids *Micraster cortestudinarium* and *M. normanniae*. This fauna is partly indicative of the *M. cortestudinarium* Zone, and the upper part of the Lewes Nodular Chalk Formation might be inferred. The change from *M. normanniae* to *M. cortestudinarium* occurs at the Hope Gap Hardground, which may be represented by a conspicuous hardground in the uppermost (unlogged) part of the section.

Conclusion: ? topmost New Pit Chalk Formation & Lewes Nodular Chalk Formation; upper Turonian & lower Coniacian, upper *T. lata* Zone, *P. (S.) plana* Zone & *M. cortestudinarium* Zone.

(20) Salisbury Plain Military Range, tank track (section 1) west of Imber village and running due south of Wadman's Coppice, Wilts.

1:50 000 282 (Devizes)

Specimen nos: WMD 9669-9675 [ST 94720 48647 to 94701 48729]

WMD 9676 [ST 94699 48720]

WMD 9677-9679 [ST 94699 48720 to 94693 48799]

WMD 9669-9675: The fauna comprises *Mytiloides* spp. shell fragments, and the Holywell Nodular Chalk Formation is inferred.

WMD 9676: The specimen is the inoceramid bivalve *Mytiloides* ex gr. *hercynicus-subhercynicus*, indicating the basal *T. lata* Zone, and by inference, the lower New Pit Chalk Formation.

WMD 9677-9679: The fauna includes the inoceramid bivalve *Inoceramus cuvieri* and the ammonite *Collignonicerias woollgari*, suggesting the upper *T. lata* Zone, and by inference, the higher part of the New Pit Chalk Formation and possibly also the basal Lewes Nodular Chalk Formation.

Conclusion: Holywell Nodular Chalk Formation, New Pit Chalk Formation, ? basal Lewes Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone & *T. lata* Zone.

(21) Quarry below Fore Hill Barn, c. 300 m north of Hill Bottom Farm, Wilts.

1:50 000 282 (Devizes)

NGR: ST 98182 52251

Specimen nos: WMD 9680-9691 BGS photograph nos: PS77267

The section comprises c. 5.5 m of hard, nodular chalk with marl seams (Fig. 7). The lowest 1.9 m of section is intensely hard chalk.

Fauna from the lowest 1.8 m of section includes the brachiopod *Orbirhynchia* sp. (coarse-ribbed morphotype) and the bivalves *Inoceramus pictus* and *Mytiloides* sp.. Coarse-ribbed forms of *Orbirhynchia* and *Mytiloides*? also occur in the highest 1.5 m of section.

The intensely hard chalk in the basal part of the section is the Melbourn Rock. The fauna in the lower part of the section spans the Cenomanian / Turonian boundary (*N. juddii* / *Mytiloides* spp. zones), near the base of the Holywell Nodular Chalk Formation. This interval of the Holywell Nodular Chalk seems to be characterised by coarse-ribbed, apparently undescribed forms of *Orbirhynchia*, as previously recorded at Ashwell in Hertfordshire (Hopson et al., 1996; Palaeontological Register 204). The rather poorly fossiliferous upper part of the section indicates that this level is below the flood-abundance of *Mytiloides*, characteristic of the middle and higher parts of the Holywell Nodular Chalk.

Conclusion: lower Holywell Nodular Chalk Formation; Upper Cenomanian & lower Turonian, *N. juddii* Zone & *Mytiloides* spp. Zone.

(22) Old quarry, c. 700 m at 055° from Auckland Farm, SW of Chitterne, Wilts.

1:50 000 298 (Salisbury)

NGR: ST 98197 41936

Specimen nos: WMD 9692-9697 BGS photograph nos: PS77239-240

The material includes the bivalve *Inoceramus cuvieri*, collected from firm to hard, smooth-textured chalk with flints and marl seams (P M Hopson locality HP 62). The lithology and fauna suggest assignment to the higher part of the New Pit Chalk Formation. Brash in the soil at the top of the section includes common glauconitised and iron-stained chalk that is almost certainly derived from the Chalk Rock, so the base of the Lewes Nodular Chalk is presumed to be only slightly above the top of the quarry.

Conclusion: upper New Pit Chalk Formation; Turonian, *T. lata* Zone.

- (23) Salisbury Plain Military Range. Tank track west of Imber village (Section 2), 600 m at 149° from Wadman's Coppice, Wilts.

1:50 000 282 (Devizes)

NGR: ST 95065 48774 to 95049 48855

Specimen nos: WMD 9698-9703

The material comprises the bivalve *Mytiloides* in hard, nodular chalk.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

- (24) Salisbury Plain Military Training Range. Small exposure by tank crossing east of Imber village and c. 2 km due south of New Zealand Farm Camp, Wilts.

1:50 000 282 (Devizes)

NGR: ST 97215 48606

Specimen nos: WMD 9704-9705

Semi-complete specimens of *Mytiloides mytiloides* are common in hard, nodular chalk at this locality, and indicate the higher part of the *Mytiloides* spp. Zone, and by inference the higher part of the Holywell Nodular Chalk Formation.

Conclusion: upper Holywell Nodular Chalk Formation; Turonian, upper *Mytiloides* spp. Zone.

- (25) Salisbury Plain Military Range. Small exposure adjacent to tank track east of Imber village and c. 2 km at 177° from New Zealand Farm Camp, Wilts.

1:50 000 282 (Devizes)

NGR: ST 97360 48571

Specimen nos: WMD 9706-9709

The fauna, collected from a c. 1 m exposure of firm, marly chalk with a well developed medium nodular flint, comprises four specimens of the inoceramid bivalve *Inoceramus cuvieri*. The lithology and fauna favour assignment to the *T. lata* Zone and the New Pit Chalk Formation.

Conclusion: New Pit Chalk Formation; Turonian, *T. lata* Zone.

- (26) Salisbury Plain Military Range. Old quarry east of Imber village and c. 2.1 km at 175° from New Zealand Farm Camp, Wilts.

1:50 000 282 (Devizes)

NGR: ST 97470 48501

Specimen nos: WMD 9710-9715 BGS photograph nos: PS77271-272

The fauna was collected from just above a hardground at the base of a 3 m thick section of hard, nodular, flinty chalk (Fig. 8).

The fauna includes the bivalves *Mytiloides costellatus* and *M. labiatoidiformis*, and is indicative of the middle part of the *P. (S.) plana* Zone. The association of this fauna with a hardground

suggests a correlation with the Hitch Wood Hardground at the top of the 'Chalk Rock' and within the lower part of the Lewes Nodular Chalk Formation.

Conclusion: lower Lewes Nodular Chalk Formation; Turonian, middle *P. (S.) plana* Zone.

(27) Exposure near tank crossing in Berril Valley ESE of Imber village and 400 m at 110° from Jeapes Coppice, Wilts.

1:50 000 282 (Devizes)

NGR: ST 98188 47944

Specimen nos: WMD 9716-9720

The fauna comprises the bivalve *Inoceramus cuvieri* in firm and hard, predominantly non-nodular chalk, and suggests assignment to the *T. lata* Zone and the upper New Pit Chalk Formation. The presence of rare nodular chalk suggests proximity to the base of the Lewes Nodular Chalk Formation.

Conclusion: upper New Pit Chalk Formation & ? basal Lewes Nodular Chalk Formation; Turonian, *T. lata* Zone.

(28) Salisbury Plain Military Range. Tank track descending hillside c. 900 m south of Stokehill Farm, Wilts.

1:50 000 282 (Devizes)

NGR: ST 95631 51169 (WMD 9721)

ST 95616 51167 (WMD 9722-9723)

ST 95580 51148 (WMD 9724-9735)

ST 95543 51123 (WMD 9736-9737)

The fauna, collected at various points along the tank track (see above) is as follows:

WMD 9721: The bivalve *Inoceramus cuvieri* is indicative of the *T. lata* Zone, and is inferred to come from the upper New Pit Chalk or basal Lewes Nodular Chalk Formation.

WMD 9722-9723: The specimens include the ammonite *Lewesiceras* sp., which is long-ranging, but here thought to occur within the *T. lata* Zone and the New Pit Chalk Formation.

WMD 9724-9735: The fauna includes the brachiopod *Orbirhynchia* sp.; the bivalve *Mytiloides* ex gr. *hercynicus-subhercynicus* and the ammonites *Lewesiceras?* and *Collignonicerias carolinum*. The lower *T. Lata* Zone is indicated, and the lower New Pit Chalk might be inferred.

WMD 9736-9737: *Mytiloides* spp. occurs in hard, nodular chalk, and indicates the presence of the *Mytiloides* spp. Zone, and by inference, the Holywell Nodular Chalk Formation.

Conclusion: Holywell Nodular Chalk Formation, New Pit Chalk Formation & basal Lewes Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone & *T. lata* Zone.

(29) Salisbury Plain Military Range. Tank track in Berril Valley, c. 780 m at 329° from Middle Barn, ENE of Chitterne, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99648 46004

Specimen no.: WMD 9738

The fauna includes very thick shell fragments of *Platyceramus* and a left valve fragment of *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(30) Salisbury Plain Military Range. Tank track in Berril Valley, c. 1 km at 351° from Middle Barn, ENE of Chitterne.

1:50 000 282 (Devizes)

NGR: ST 99931 46369

Specimen nos: WMD 9739-9740

The fauna includes shell fragments of *Platyceramus* and a left valve fragment of *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(31) Salisbury Plain Military Range. Roadside section in Berril Valley c. 750 m at 327° from Chapperton Down, Wilts.

1:50 000 281 (Frome)

NGR: ST 93822 47131

Specimen no.: WMD 9741

The specimen comprises shell fragments of the bivalve *Cremnoceramus*, collected from hard, nodular chalk and probably less than 10 m above the 'Chalk Rock'.

The lithology and fauna suggest assignment to the topmost *P. (S.) plana* Zone or *M. cortestudinarium* Zone and the upper part of the Lewes Nodular Chalk Formation.

Conclusion: upper Lewes Nodular Chalk Formation; lower Coniacian, topmost *P. (S.) plana* Zone or *M. cortestudinarium* Zone.

(32) Salisbury Plain Military Range. Tank track, c. 600 m at 305° from Bowl's Barrow, Wilts.

1:50 000 281 (Frome)

NGR: ST 93822 47131

Specimen no.: WMD 9742

The specimen comprises shell fragments of the bivalve *Cremnoceramus*, collected from patchily hard, nodular chalk.

Conclusion: upper Lewes Nodular Chalk Formation; lower Coniacian, topmost *P. (S.) plana* Zone or *M. cortestudinarium* Zone.

(33) Salisbury Plain Military Range. Immediately in front of Vedette Point 8, c. 1.8 km at 294° from church at Tilshead, Wilts.

1:50 000 282 (Devizes)

NGR: SU 01871 48737

Specimen no.: WMD 9743

The specimen is a possible valve fragment of the bivalve *Cremnoceramus*.

The size and thickness of the valve fragment suggests that it is unlikely to belong to the undescribed forms of *Cremnoceramus* from the basal *M. coranguinum* Zone or the thin-shelled forms from the topmost *P. (S.) plana* Zone, favouring possible assignment to the *M. cortestudinarium* Zone wherein this bivalve has its main occurrence.

Conclusion: ? upper Lewes Nodular Chalk Formation; ? Coniacian, ? upper *M. cortestudinarium* Zone.

(34) Salisbury Plain Military Range. Tank track in Berril Valley, c. 650 m at 214° from Chapperton Down, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99208 47296

Specimen nos: WMD 9744-9745

The specimen, in patchily hard chalk, is the bivalve *Cremnoceramus* sp. (aff. *deformis erectus*), indicative of the latest *P. (S.) plana* Zone or *M. cortestudinarium* Zone. Although the specimen appears similar to *C. deformis erectus*, field relations suggest that the outcrop is likely to be within the higher part of the *M. cortestudinarium* Zone and therefore above the typical range of this species. The higher part of the Lewes Nodular Chalk Formation might be inferred.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, probably *M. cortestudinarium* Zone.

(35) Salisbury Plain Military Range. Tank track at Vedette Point 3, c. 700 m due west of Cornbury Farm, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99783 49956

Specimen nos: WMD 9746-9752

The track section exposes basal Lewes Nodular Chalk (including 'Chalk Rock') underlain by hard, smooth-textured chalk belonging to the topmost part of the New Pit Chalk Formation. The specimens are of the bivalve *Inoceramus cuvieri*, indicative of the upper *T. lata* Zone, collected from nodular chalk below the 'Chalk Rock'.

Conclusion: topmost New Pit Chalk Formation & basal Lewes Nodular Chalk Formation; Turonian, upper *T. lata* Zone.

(36) Quarry c. 1 km at 147° from Hurdcott Home Farm, SW of Barford St. Martin, Wilts.

1:50 000 298 (Salisbury)

NGR: SU 0504 2990

BGS photograph nos: PS77241-244

The section exposes c. 4 m of Shaftesbury Sandstone Member overlain by c. 4 m of Boyne Hollow Chert Member (Fig. 9). The bivalve *Pycnodonte vesiculosum* is locally abundant in the Shaftesbury Sandstone. Bristow *et al.* (1995) placed the junction of the Upper Albian *M. (M.) inflatum* and *S. dispar* zones at the junction of the Shaftesbury Sandstone and Boyne Hollow Chert members

Conclusion: Upper Greensand Formation, Shaftesbury Sandstone & Boyne Hollow Chert members.

(37) East of Quebec Farm, Knook.

1:50 000 282 (Devizes)

NGR: ST 96654 43562

Specimen no.: PMH 3842

The specimen is a crushed internal mould of the echinoid *Micraster* sp., and is biozonally undiagnostic.

Conclusion: None possible.

(38) New barn excavation (locality HP 67), Valley Farm, Chitterne, Wilts.

1:50 000 282 (Devizes)

NGR: ST 98203 43823

Specimen nos: PMH 3843-3853

The fauna includes the echinoid *Micraster cortestudinarium* and the bivalves *Cremnoceramus crassus* and *C. denselamellatus*.

Conclusion: upper Lewes Nodular Chalk; Coniacian, *M. cortestudinarium* Zone.

(39) 300 m NE of Valley Farm, Chitterne, Wilts.

1:50 000 282 (Devizes)

NGR: ST 98419 44142

Specimen no.: PMH 3854

The specimen is the echinoid *Micraster* aff. *turonensis*. The morphology of the ambulacra might favour the lower *M. coranguinum* Zone, and by inference the lower Seaford Chalk Formation.

Conclusion: upper Lewes Nodular Chalk Formation or lower Seaford Chalk Formation; Coniacian, upper *M. cortestudinarium* Zone or lower *M. coranguinum* Zone.

(40) 800 m N of Valley farm, Chitterne, Wilts.

1:50 000 282 (Devizes)

NGR: ST 98135 44686

Specimen no.: PMH 3855

The specimen comprises shell fragments of *Platyceramus* and *Volvicceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(41) Breakheart Bottom, Salisbury Plain Training Area (SPTA), Wilts.

1:50 000 282 (Devizes)

NGR: ST 98828 45168

Specimen no.: PMH 3856

The specimen comprises shell fragments of *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(42) Near Pumping Station, Chitterne, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99646 44818

Specimen no.: PMH 3857

The specimen is the bivalve *Cremnoceramus* in hard chalk.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, *M. cortestudinarium* Zone.

(43) Breakheart Bottom, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99147 45182

Specimen no.: PMH 3858

The specimen comprises shell fragments of the bivalve *Platyceramus*. Proximity of this locality to (41) (above) suggests assignment to the lower *M. coranguinum* Zone and the lower Seaford Chalk Formation.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(44) Southern Transit Route, Berril Valley Crossing, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99820 45640

Specimen no.: PMH 3859

The specimen comprises shell fragments of *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(45) Near Southern Transit Route, Berril Valley Crossing, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99797 45651

Specimen no.: PMH 3860

The specimen comprises shell fragments of *Platyceramus*. Proximity to (44) (above) suggests a similar horizon.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(46) Near Southern Transit Route, Berril Valley Crossing, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99838 45655

Specimen no.: PMH 3861

The specimen comprises shell fragments of *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(47) Near Southern Transit Route, Berril Valley Crossing, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99865 45673

Specimen no.: PMH 3862

The specimen comprises shell fragments of *Platyceramus* and ?*Volviceramus involutus*. Proximity to (44) (above) suggests a similar horizon.

Conclusion: Lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(48) East side of Berril Valley, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99982 46256

Specimen no.: PMH 3863

The specimen is a moderately thick shell fragment of *Platyceramus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(49) North of Berril Valley Bailey Bridge, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 99121 47437

Specimen no.: PMH 3864

The specimen is an indeterminate inoceramid shell fragment.

Conclusion: None possible.

(50) Near Tilshead water tower, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 02335 47393

Specimen no.: PMH 3865

The specimen is a large shell fragment of *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(51) West of Copehill Down village, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 00259 45628

Specimen no.: PMH 3866

The specimen comprises shell fragments of *Platyceramus*, including moderately thick-shelled examples.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(52) ENE of Vedette Point V4, Tilshead Down, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 01973 46886

Specimen no.: PMH 3867

The specimen comprises shell fragments of *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(53) On track 170 m up from Chitterne road, 1 km NW of Chitterne church, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9977 4493

Specimen no.: ARF 1342

The specimens include a thick shell fragment of *Platyceramus* and a possible right valve fragment of *Volviceramus involutus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(54) Brash in track, Chapperton Down, 650 m WNW of Kill Barrow, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9936 4804

Specimen no.: ARF 1343

The specimens include moderately thick shelled *Platyceramus* and a possible *Volviceramus involutus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(55) Brash in track on valley side c. 5 m up hillside, 1650 m WNW of Kill Barrow, 200 m from tank bridge, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9846 4803

Specimen nos: ARF 1344-1345

The fauna comprises the echinoid *Echinocorys* sp. (crushed & infilled with hard chalk) and the bivalve *?Mytiloides costellatus*.

Conclusion: ? lower to mid Lewes Nodular Chalk; ? Turonian, ? mid *P. (S.) plana* Zone.

(56) On track, 300 m from road, 1.05 km NE of Chitterne church, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9989 4475

Specimen nos: ARF 1346-1347

The material comprises the echinoid *Micraster* sp. and shell fragments of *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(57) Brash next to track on W side of valley, 350 m N of Kill Barrow, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0004 4824

Specimen no.: ARF 1348

The specimens include shell fragments of *Platyceramus* and a possible *Volvicceramus involutus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(58) Brash on southern edge of field at bend in fence, 1.45 km NNE of Kill Barrow, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0015 4947

Specimen nos: ARF 1349-1351

The fauna includes the bivalve *Cremnoceramus* in patchily hard chalk.

Conclusion: ? upper Lewes Nodular Chalk; Coniacian, ? upper *M. cortestudinarium* Zone.

(59) In brash on minor track, close to old hedge, half way up valley side, 1.15 km E of Kill Barrow, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0119 4774

Specimen no.: ARF 1352

The specimen comprises numerous *Platyceramus* shell fragments, including very thick-shelled examples.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(60) Small cutting in southern perimeter range road, 450 m south of main tank crossing [SU 0200 4880], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0199 4835

Specimen nos: ARF 1353-1354

The specimens include the bivalve *Cremnoceramus* sp., in patchily hard chalk.

Conclusion: ? upper Lewes Nodular Chalk; Coniacian, ? upper *M. cortestudinarium* Zone.

(61) Brash in ploughed field c. 100 m from road, 350 m NNW of main tank crossing [SU 0200 4880], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0188 4915

Specimen nos: ARF 1355-1356

The specimens include the bivalve *Cremnoceramus* sp., in patchily hard chalk.

Conclusion: ? upper Lewes Nodular Chalk; Coniacian, ? upper *M. cortestudinarium* Zone.

(62) Shallow ditch / cutting on southern perimeter range road, 1.05 km from major tank crossing [SU 0200 4880] to south, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0192 4772

Specimen nos: ARF 1357

The specimen includes shell fragments of the bivalves *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(63) Brash in track, 80 m from road crossing, 760 m NNW of major tank crossing [SU 0200 4880], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0167 4949

Specimen nos: ARF 1358-1360

The fauna comprises a rhynchonellid brachiopod, a terebratulid brachiopod and sponges. All of the material occurs in very hard chalk and one of the sponges appears to be phosphatised.

Although not biozonally diagnostic, the lithology and style of faunal preservation suggests assignment to the upper *T. lata* Zone or lower *P. (S.) plana* Zone, in the lower part of the Lewes Nodular Chalk Formation.

Conclusion: ? lower Lewes Nodular Chalk Formation; ? Turonian, ? upper *T. lata* Zone or ? lower *P. (S.) plana* Zone.

(64) Field brash at edge of ploughed field, 100 m SE of copse, 520 m NNE of major tank crossing [SU 0200 4880], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0205 4930

Specimen no.: ARF 1361

The specimen comprises shell fragments of *Platyceramus*.

Conclusion: Seaford Chalk Formation; ? *M. coranguinum* Zone.

(65) Field brash just NE of copse and 50 m NW of road, 1.25 km SSE of major tank crossing [SU 0200 4880], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0236 4759

Specimen no.: ARF 1362

The specimen comprises shell fragments of *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(66) Brash in middle of ploughed field, 200 m NNE of track-road junction, and 610 m SE of tank crossing [SU 0200 4880], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0248 4840

Specimen nos: ARF 1363-1364

The specimens are part and counter-part of the bivalve *Cremnoceramus* sp., in soft chalk.

The morphology of the *Cremnoceramus*, and association with soft chalk, might suggest assignment to the basal *M. coranguinum* Zone, and by inference the basal part of the Seaford Chalk Formation

Conclusion: ? basal Seaford Chalk Formation; Coniacian, ? basal *M. coranguinum* Zone.

(67) Brash in track near crest of hill, 155 m N of Triangulation Point at Knighton Barrow, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1280 4551

Specimen no.: ARF 1365

The specimen consists of possible ophiuroid test fragments.

Conclusion: None possible.

(68) Brash in base of track in valley floor, 500 m SSW of tank crossing on Chitterne road [SU 0296 4359], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0284 4311

Specimen no.: ARF 1366

The specimen comprises shell fragments of *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(69) Brash in track, 220 m from SE corner of Fox Covert, and 750 m due N of tank crossing [SU 0296 4359], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0298 4436

Specimen no.: ARF 1367

The specimen is a shell fragment of the inoceramid bivalve *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(70) Small exposure at east end of landscaped sports field, Larkhill Barracks, 360 m SE of Knighton Barrow, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1303 4509

Specimen no.: ARF 1368

The specimen consists of a small crinoid brachial. Although biozonally undiagnostic, such brachials are usually common in the *U. socialis* Zone, and may indicate assignment to the basal part of the Newhaven Chalk Formation.

Conclusion: ? basal Newhaven Chalk; ? Santonian, ? *U. socialis* Zone.

(71) Rabbit scrape on fence, at eastern end of sports field at summit of hill 400 m due E of Knighton Triangulation Point, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1321 4535

Specimen no.: ARF 1369

The fauna comprises the crinoids *Uintacrinus socialis* (calyx plate) and *Bourgueticrinus* (stem ossicle).

Conclusion: basal Newhaven Chalk; Santonian, *U. socialis* Zone.

(72) Field brash at NW edge of field, by bend in hedge, 270 m SE of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0371 4782

Specimen no.: ARF 1370

The fauna comprises the bivalves ?*Platyceramus* and ?*Volviceramus involutus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone

(73) Field brash in middle of field 450 m N of White Barrow and 700 m SSW of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0322 4733

Specimen no.: ARF 1371

The specimen is the echinoid *Micraster coranguinum*, showing divided ambulacra.

Conclusion: Seaford Chalk Formation or lower Newhaven Chalk Formation; Coniacian or Santonian, *M. coranguinum* Zone or *U. socialis* Zone.

(74) Field brash by track in valley floor, 160 m NNE of NE corner of Fox Covert, 1.3 km N of tank crossing [SU 0296 4360], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0292 4491

Specimen no.: ARF 1372

The specimen comprises shell fragments of *Platyceramus* and ?*Volvicceramus involutus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(75) Brash in track 170 m W of SW corner of West Down Plantation, 1.55 km NE of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0463 4903

Specimen no.: ARF 1373

The specimen comprises shell fragments of *Platyceramus* and *Volvicceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(76) Badger scrape in plantation by track on ridge N of Westdown Camp, 1.15 km NE of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0435 4871

Specimen no.: ARF 1374

The specimen is a shell fragment of *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(77) Field brash in middle of field, 300 m NW of north entrance to Westdown Camp and 810 m from Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0415 4843

Specimen no.: ARF 1375

The specimen comprises shell fragments of *Platyceramus* and *Volvicceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(78) Brash in track near summit of ridge, 750 m E of north entrance to Westdown Camp, and 1.5 km E of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0499 4806

Specimen no.: ARF 1376

The specimen comprises shell fragments of *Platyceramus* and *Volvicceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(79) Brash in field just south of range perimeter road, 250 m E of sewage works, and 1.15 km ESE of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0455 4763

Specimen no.: ARF 1377

The specimen consists of shell fragments of *Platyceramus*, including moderately thick-shelled examples.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(80) Brash in field by playing field next to west entrance to Westdown Camp, 800 m ENE of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0420 4827

Specimen no.: ARF 1378

The specimen is a shell fragment of *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(81) In track brash at valley floor level, 1.18 km due E of Tilshead church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0465 4799

Specimen no.: ARF 1379

The specimen comprises shell fragments of *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(82) Brash by Long Barrow, 840 m ESE of Triangulation Point at Robin Hood's Ball, Larkhill, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1092 4585

Specimen no.: ARF 1380

The specimen comprises shell fragments of *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(83) Brash on N side of Netheravon Bake, 1.25 km NE of Triangulation Point at Robin Hood's Ball, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1115 4670

Specimen no.: ARF 1381

The specimen is an indeterminate inoceramid shell fragment.

Conclusion: None possible.

(84) Brash in rabbit scrape near valley floor, 120 m from Robin Hood Ball Clump and 600 m NE of Triangulation Point [SU 1011 4609], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1058 4652

Specimen no.: ARF 1382

The specimen is a crushed echinoid, possibly *Echinocorys*.

Conclusion: None possible.

(85) Brash in track, 500 m E of Kill Barrow, Wilts.

1:50 000 282 (Devizes)

NGR: ST 9956 4792

Specimen no.: ARF 1383

The specimen comprises shell fragments of *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(86) Tank crossing in Chitterne road, 1 km S of Fox Covert, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0295 4355

Specimen no.: ARF 1384

The specimen comprises shell fragments of *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(87) South of Battlesbury Hill, Warminster, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 89905 45062

Specimen nos: PMH 3922-3925

The material comprises specimens of the ammonite *Schloenbachia varians* and the bivalve *Inoceramus tenuis*?

Conclusion: ? topmost West Melbury Marly Chalk Formation; ? basal Middle Cenomanian, ? basal *A. rhotomagense* Zone.

(88) 200 m NE of Galley Bridge, Warminster, Wilts.

1:50 000 281 (Frome)

NGR: ST 89466 46074

Specimen nos: PMH 3926-3928

The specimens are the bivalve *Inoceramus* aff. *atlanticus* and the ammonite *Calycoceras* sp.

Conclusion: lower Zig Zag Chalk Formation; Middle Cenomanian, ? upper *A. rhotomagense* Zone or ? lower *A. jukesbrownei* Zone.

(89) 1km E of Whitehorse Farm, Bratton, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 91115 51041

Specimen no.: PMH 3929

The fragmentary specimen is the echinoid *Micraster* sp. The morphology of the periplastron suggests assignment to the *P. (S.) plana* Zone.

Conclusion: lower to middle Lewes Nodular Chalk Formation; Turonian, *P. (S.) plana* Zone.

(90) White Cliff, Bratton, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 91549 51615

Specimen nos: PMH 3930-3938

The material comprises semi-complete specimens of Early Turonian *Mytiloides* spp.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(91) 600 m east of Imber Clump, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 92187 47952

Specimen nos: PMH 3939-3943

The fauna comprises a sponge, an inoceramid shell fragment and the echinoids *Micraster normanniae*, *M. sp.* and *Echinocorys* (rounded morphotype).

Conclusion: middle Lewes Nodular Chalk Formation; Turonian, *P. (S.) plana* Zone or lower *M. cortestudinarium* Zone.

(92) 800 m E of Imber Clump, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 92396 48003

Specimen no.: PMH 3944

The specimen is the ammonite *Puzosia*?

Conclusion: None possible, although the record of *Puzosia* is compatible with the field assignment of lower Lewes Nodular Chalk Formation.

(93) 400 m E of Imber Clump, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 91874 48115

Specimen no.: PMH 3945

The specimen is a shell fragment of the bivalve *Cremnoceramus* sp.

Conclusion: upper Lewes Nodular Chalk Formation or basal Seaford Chalk Formation; Coniacian, *M. cortestudinarium* Zone or *M. coranguinum* Zone.

(94) 1km NE of Imber Clump, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 91902 48872

Specimen nos: PMH 3946-3948

The material comprises shell fragments of the bivalve *Cremnoceramus*, including a possible fragment of *C. crassus*.

Conclusion: ? upper Lewes Nodular Chalk Formation; Coniacian, ? *M. cortestudinarium* Zone.

(95) 800 m ENE of Imber Clump, SPTA, Wilts.

1:50 000 281 (Frome)

NGR: ST 92238 48310

Specimen nos: PMH 3949-3953

The fauna comprises a fragment of a heteromorph ammonite and fragments of the bivalve *Cremnoceramus*, including *C. aff. denselamellatus*.

Conclusion: ? upper Lewes Nodular Chalk Formation; Coniacian, ? *M. cortestudinarium* Zone.

(96) Luccombe Terrace, Bratton, Wilts.

1:50 000 281 (Frome)

NGR: ST 91727 52067

Specimen nos: PMH 3954-3955

The fauna includes a phosphatised specimen of the ammonite *Schloenbachia varians*.

Conclusion: ? basal or lower West Melbury Marly Chalk Formation; ? Lower Cenomanian.

(97) South of Longcoombe Bottom, Bratton, Wilts.

1:50 000 281 (Frome)

NGR: ST 92240 50650

Specimen no.: PMH 3956

The specimen is the brachiopod *Orbirhynchia* sp., in hard chalk.

Conclusion: None possible, although the record of *Orbirhynchia* is not incompatible with the field assignment of Holywell Nodular Chalk Formation.

(98) Longcoombe Bottom, Bratton, Wilts.

1:50 000 281 (Frome)

NGR: ST 92264 51489

Specimen nos: PMH 3957-3959

The fauna includes the brachiopod *Capillithyris squamosa*.

Conclusion: basal Zig Zag Chalk Formation; basal Middle Cenomanian, basal *A. rhotomagense* Zone.

(99) Off Imber Road, Longcoombe Bottom, Bratton, Wilts.

1:50 000 281 (Frome)

NGR: ST 92435 51555

Specimen nos: PMH 3960-3965

The fauna comprises a small rhynchonellid brachiopod (*Grasirhynchia* ?), and the bivalves *Lima aspera*, *Inoceramus* sp. (possibly *I. reachensis* sensu Etheridge non Woods) and *Neithea* sp. .

Conclusion: Grey Chalk Subgroup.

(100) 800 m N of New Zealand Farm Camp, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 97692 51370

Specimen nos: PMH 3966-3969

The fauna comprises fragments of the bivalve *Mytiloides*, in hard, nodular chalk.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(101) 800 m N of New Zealand Farm Camp, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: ST 97725 51369

Specimen no.: PMH 3970

The specimen is a belemnite fragment (*?Praeactinocamax plenus*) in marly chalk.

Conclusion: ? basal Holywell Nodular Chalk Formation; ? Upper Cenomanian, ? *M. geslinianum* Zone.

(102) North of New Copse, COTEC, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 02880 50782

Specimen nos: PMH 3971-3972

The specimens are the bivalve *Tethyoceramus*? and the echinoid *Plesiocorys (P.) placenta*?

Conclusion: middle Lewes Nodular Chalk Formation; ? upper Turonian, ? upper *P. (S.) plana* Zone.

(103) COTEC, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 02535 51177

Specimen nos: PMH 3973-3976

The fauna includes moderately thick shell fragments of the bivalve *Cremnoceramus* in patchily hard chalk.

Conclusion: ? middle to upper Lewes Nodular Chalk Formation; Coniacian, ? *M. cortestudinarium* Zone.

(104) South of the Octagon, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 03417 51245

Specimen no.: PMH 3977

The specimen is the echinoid *Micraster normanniae*.

Conclusion: middle Lewes Nodular Chalk Formation; upper Turonian or lower Coniacian upper *P. (S.) plana* Zone or lower *M. cortestudinarium* Zone.

(105) Ball Down, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 04746 51137

Specimen nos: PMH 3978-3981

The fauna includes the bivalve *Mytiloides* aff. *labiatoidiformis*, in hard chalk containing grains of glauconite.

Conclusion: lower-middle Lewes Nodular Chalk Formation (? top of 'Chalk Rock'); Turonian, *P. (S.) plana* Zone.

(106) Near Slag Barrow, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 09179 50895

Specimen no.: PMH 3982

The specimen comprises numerous shell fragments of the bivalve *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(107) Near Slag Barrow, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 09122 51115

Specimen no.: PMH 3983

The specimen is a shell fragment of the bivalve *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; ? *M. coranguinum* Zone.

(108) Brash in shallow scrape in path next to gate at top of wooded slope, 420 m due N of Triangulation Point on Upton Cow Down, Westbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 8786 4964

Specimen nos: ARF 1385-1386

The fauna comprises lower Turonian forms of the bivalve *Mytiloides*, with conspicuous shell preservation in hard, nodular chalk.

Conclusion: Holywell Nodular Chalk Formation; lower Turonian, *Mytiloides* spp. Zone.

(109) On track, 50 m from Westbury Road at field gate, 1.1 km ENE of A36 roundabout [ST 8860 4655], Wilts.

1:50 000 281 (Frome)

NGR: ST 8708 4694

Specimen nos: ARF 1387-1388

The specimens are part and counterpart of the ammonite *Schloenbachia* in hard limestone.

Conclusion: Grey Chalk Subgroup.

(110) Brash in track on slight bend, half way up hill, 1.2 km SW of Triangulation Point on Upton Cow Down, Westbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 8865 4826

Specimen no.: ARF 1389

The specimen is the bivalve *Mytiloides* sp. in hard chalk.

Conclusion: ? Holywell Nodular Chalk Formation; Turonian, ? *Mytiloides* spp. Zone.

(111) Brash on western edge of ploughed field 880 m NE of Triangulation Point on Upton Cow Down, Westbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 8856 4971

Specimen nos: ARF 1390-1400

The specimens are fragments of the bivalve *Mytiloides*, including *M. ex gr. mytiloides*, in hard chalk.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(112) Field brash on northeastern edge of field 30 m from Vedette Point 5, 640 m NE of Parsonage Field Barn, Wilts.

1:50 000 281 (Frome)

NGR: ST 8881 4742

Specimen nos: ARF 1401-1402

The specimens are of the echinoids *Echinocorys* sp. and *Micraster* sp. . The *Micraster* has a periplastron morphology suggesting assignment to the middle *P. (S.) plana* Zone.

Conclusion: ? middle Lewes Nodular Chalk; Turonian; ? middle *P. (S.) plana* Zone.

(113) Brash in small trackside scrape in bottom of valley, 300 m S of Westbury Quarry, 1.6 km NW of Triangulation Point at Upton Cow Down, Westbury, Wilts.

1:50 000 281 (Frome)

NGR: ST 8924 5008

Specimen nos: ARF 1403-1406

The specimens are of the bivalve *Mytiloides*, including *M. mytiloides* in hard chalk.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(114) Brash at top of scree slope in grenade training range, Warminster Ranges, 1.25 km ESE of Upton Cow Down Triangulation Point, Wilts.

1:50 000 281 (Frome)

NGR: ST 8909 4899

Specimen no.: ARF 1407

The specimen is a fragment of a thin-tested echinoid in creamy grey chalk.

Conclusion: ? Zig Zag Chalk Formation.

(115) Field brash 60 m due south of junction of road with MOD range road, 200 m NE of railway bridge at [ST 9024 4450], Wilts.

1:50 000 281 (Frome)

NGR: ST 9035 4471

Specimen nos: ARF 1408-1412

The specimens include the ammonite *Schloenbachia varians* and the bivalve *Inoceramus* ex gr. *virgatus*?

Conclusion: ? West Melbury Marly Chalk Formation; ? Lower Cenomanian, ? *M. dixonii* Zone.

(116) Brash at edge of field, 100 m W of Middleton Farm, 350 m SSE of railway bridge at [ST 9024 4450], Wilts.

1:50 000 281 (Frome)

NGR: ST 9058 4442

Specimen nos: ARF 1413-1414

The specimens are of the ammonite *Schloenbachia*, in hard limestone.

Conclusion: Grey Chalk Subgroup.

(117) Brash in track running up spur, 1 km SE of North Farm and 1.25 km NNE of A36 roundabout at [ST 9170 4290], Wilts.

1:50 000 281 (Frome)

NGR: ST 9238 4407

Specimen no.: ARF 1415

The specimen is of the bivalve *Mytiloides* ex gr. *mytiloides*, in hard chalk.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(118) Brash in track at bend near top of hill, by field boundary, 1.25 km NNW of A36 roundabout at [ST 9170 4290], Wilts.

1:50 000 281 (Frome)

NGR: ST 9137 4415

Specimen nos: ARF 1416-1417

The specimens are of the rhynchonellid brachiopod *Orbirhynchia* sp.

Conclusion: None possible.

(119) Field brash on western side of valley, 220 m S of track junction at [ST 9454 5296] and 1.1 km W of Triangulation Point at [ST 9561 5260], Wilts.

1:50 000 281 (Frome)

NGR: ST 9456 5274

Specimen nos: ARF 1418-1426

The specimens include the bivalve *Mytiloides mytiloides*.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(120) Field brash on track, 10 m north of field boundary, 500 m SW of North Farm, 1.35 km N of A36 roundabout at [ST 9170 4290], Wilts.

1:50 000 281 (Frome)

NGR: ST 9149 4426

Specimen no.: ARF 1427

The specimen is the bivalve *Mytiloides* sp. in hard chalk. The morphology of the *Mytiloides* does not appear to match Late Turonian forms of this genus, therefore a possible Lower Turonian age might be inferred.

Conclusion: ? Holywell Nodular Chalk Formation; ? Lower Turonian, ? *Mytiloides* spp. Zone.

(121) Small exposure in earthworks on N side of Scratchbury Hill, 1.7 km NW of A36 roundabout at [ST 9170 4290], Wilts.

1:50 000 281 (Frome)

NGR: ST 9107 4449

Specimen nos: ARF 1428-1431

The fauna includes the inoceramid bivalve *Mytiloides mytiloides*, in hard chalk.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(122) Badger scrape on E side of southern range road at lower end of valley, 1.7 km NE of Heytesbury House [ST 9320 4282], Wilts.

1:50 000 281 (Frome)

NGR: ST 9418 4425

Specimen no.: ARF 1432

The specimen is the bivalve *Mytiloides mytiloides*, in hard chalk.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(123) In NW corner of field at track junction, Coulston Hill, 1.1 km WNW of Triangulation Point at [ST 9561 5260], Wilts.

1:50 000 281 (Frome)

NGR: ST 9455 5295

Specimen nos: ARF 1433-1435

The fauna includes the bivalve *Mytiloides* ex gr. *hercynicus-subhercynicus*.

Conclusion: lower New Pit Chalk Formation; Turonian, lower *T. lata* Zone.

(124) Bevin's Barn section, on range road from Knook Camp to Knook Down, in cutting next to Bevin's Barn, 750 m NW of Heytesbury House [ST 9320 4285], Wilts.

1:50 000 281 (Frome)

NGR: ST 9384 4319

Specimen nos: ARF 1436-1452

The fauna comprises specimens of the inoceramid bivalve *Inoceramus cuvieri*. ARF 1438-1446, collected 6.6 m above the base of the section, includes samples of nodular chalk.

Conclusion: upper New Pit Chalk and ?basal Lewes Nodular Chalk; Turonian, upper *T. lata* Zone.

(125) Field brash in NE corner of field next to track, 950 m NW of Triangulation Point at [ST 9561 5260], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9478 5293

Specimen nos: ARF 1453-1456

The material includes the brachiopod *Orbirhynchia* sp. and the bivalve *Mytiloides* sp. (? Lower Turonian form), in hard chalk.

Conclusion: ? Holywell Nodular Chalk Formation; ? Lower Turonian, ? *Mytiloides* spp. Zone.

(126) Field brash on edge of field on east side of valley, 260 m SE of track junction and 950 m WNW of Triangulation Point at [ST 9561 5266], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9466 5274

Specimen nos: ARF 1457-1461

The fauna includes the bivalve *Mytiloides mytiloides*, in hard, nodular chalk.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(127) Field brash next to track, 50 m from junction with road, 760 m NW of Triangulation Point at [ST 9561 5260], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9492 5295

Specimen nos: ARF 1462-1466

The fauna includes the bivalve *Mytiloides mytiloides*, in hard, nodular chalk.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(128) Brash in track 480 m NNE of junction on road to New Zealand Farm Camp, 1.15 km NW of Triangulation Point at [ST 9826 5064], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9750 5152

Specimen nos: ARF 1467-1471

The fauna contains the bivalve *Inoceramus cuvieri*, in moderately hard chalk.

Conclusion: upper New Pit Chalk Formation or lower Lewes Nodular Chalk Formation; Turonian, upper *T. lata* Zone.

(129) Brash in track, 520 m NNE of junction on road to New Zealand Farm Camp, 1.15 km NW of Triangulation Point at [ST 9826 5064], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9764 5153

Specimen nos: ARF 1472-1475

The fauna contains Lower Turonian forms of *Mytiloides*, including *M. mytiloides* in hard chalk.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(130) Brash in track, 1.1 km NNW of Triangulation Point at [ST 9826 5064], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9761 5114

Specimen no.: ARF 1476

The specimen is the bivalve *Mytiloides* ex gr. *hercynicus-subhercynicus*.

Conclusion: lower New Pit Chalk Formation; Turonian, lower *T. lata* Zone.

(131) Brash in ploughed field, just north of earthworks 2.7 km NE of Heytesbury House, [ST 9319 4284], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9485 4499

Specimen no.: ARF 1477

The specimen comprises numerous shell fragments of the bivalve *Platyceramus*, including moderately thick-shelled examples.

Conclusion: ? Seaford Chalk Formation; Coniacian or Santonian, ? *M. coranguinum* Zone.

(132) Brash in ploughed field, 170 m S of track, 900 m NW of Triangulation Point at [ST 9561 5260], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9478 5280

Specimen nos: ARF 1478-1479

The specimens are of the ammonite *Collignonicerias woollgari*.

Conclusion: New Pit Chalk Formation; Turonian, *T. lata* Zone.

(133) Brash in ploughed field, 160 m S of track and 710 m WNW of Triangulation Point at [ST 9561 5260], Wilts.

1:50 000 282 (Devizes)

NGR: ST 9485 5273

Specimen nos: ARF 1480-1482

The fauna includes *Mytiloides* ex gr. *mytiloides*.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(134) Brash in field, 30 m NE of observation tower 200 m SE of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0574 5500

Specimen no.: ARF 1483

The specimen includes shell fragments of the bivalve *Cremnoceramus*, including moderately thick-shelled examples.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, *M. cortestudinarium* Zone.

(135) Brash in bomb crater, next to old track 2.3 km SW of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0498 5285

Specimen nos: ARF 1484-1485

The fauna includes the bivalve *Mytiloides costellatus* and the echinoid *Echinocorys* sp. . The matrix associated with the specimens contains grains of glauconite.

Conclusion: lower Lewes Nodular Chalk Formation (probably at level of Hitch Wood Hardground at top of 'Chalk Rock'); Turonian, middle *P. (S.) plana* Zone.

(136) Brash in bomb crater, on S side of valley 1.75 km SW of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0504 5362

Specimen nos: ARF 1486-1489

The fauna comprises a phosphatised sponge, the echinoid *Plesiocorys (Sternotaxis) plana* and the bivalves *Spondylus spinosus* and ? *Cremnoceramus* ex gr. *waltersdorfensis* (fragment).

Conclusion: Middle Lewes Nodular Chalk Formation; upper Turonian, upper *P. (S.) plana* Zone.

(137) In rampart surrounding old pond / enclosure, 800 m WSW of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0510 5501

Specimen nos: ARF 1490-1491

The fauna comprises fragments of the bivalve *Mytiloides* of uncertain specific affinity. There are several shelled fragments, perhaps favouring assignment to the Holywell Nodular Chalk Formation rather than the field designation of New Pit Chalk Formation.

Conclusion: None possible.

(138) In track exposure by old gate post on old road, 120 m SE of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0599 5507

Specimen no.: ARF 1492

The specimen includes thick shell fragments of the bivalve *Cremnoceramus*.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, *M. cortestudinarium* Zone.

(139) Brash in bomb crater near bottom of valley, 400 m due E of track and 2.6 km SSE of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0626 5249

Specimen no.: ARF 1493

The specimen includes thick shell fragments of the bivalve *Cremnoceramus*.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, *M. cortestudinarium* Zone.

(140) Brash in tank track on N side of valley, 350 m due W of track, 1.8 km SSE of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0669 5345

Specimen no.: ARF 1494

The specimen includes thick shell fragments of the bivalve *Cremnoceramus*.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, *M. cortestudinarium* Zone.

(141) Brash in badger scrape, on SE side of valley, 950 m due E of track and 2.4 km SE of Triangulation Point [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0742 5315

Specimen no.: ARF 1495

The specimen includes thick shell fragments of the bivalve *Cremnoceramus*.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, *M. cortestudinarium* Zone.

(142) Brash in scrape on N side of valley 670 M due E of track, 2.4 km SE of Triangulation Point at [SU 0590 5010], Wilts.

1:50 000 282 (Devizes)

NGR: SU 0715 5303

Specimen no.: ARF 1496

The specimen includes moderately thick shell fragments of the bivalve *Cremnoceramus*.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, *M. cortestudinarium* Zone.

(143) Badger scrape on top of ridge 450 m N of earthworks and 1.85 km WNW of observation post at [SU 1187 5107], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1003 5133

Specimen no.: ARF 1497

The specimen contains thin-shelled fragments of probable *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; Coniacian or Santonian, ? *M. coranguinum* Zone.

(144) Brush in track near base of valley, 400 m S of earthworks, 1.9 km SW of observation post at [SU 1187 5107], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1003 5045

Specimen no.: ARF 1498

The specimen contains thin-shelled fragments of probable *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; Coniacian or Santonian, ? *M. coranguinum* Zone.

(145) Badger scrape on hillside, 1.2 km due west of Vedette Point 13, SPTA, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1003 5368

Specimen no.: ARF 1499

The specimen is a fragment of the echinoid *Micraster* sp. The morphology of the periplastron suggests possible assignment to the lower *M. coranguinum* Zone.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? low *M. coranguinum* Zone.

(146) Brush in badger scrape, Compton Down, 1.35 km NW of observation post [SU 1187 5107], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1070 5181

Specimen no.: ARF 1500

The specimen is a fragment of the echinoid *Micraster* sp. The morphology of the ambulacra and periplastron suggest possible assignment to the lower *M. coranguinum* Zone.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? low *M. coranguinum* Zone.

(147) Brush in track at bottom of slope, 790 m due S of observation post at [SU 1187 5107], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1189 5030

Specimen no.: ARF 1501

The specimen includes very thick shell fragments of the inoceramid bivalves *Platyceramus* and *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(148) Brush in track at base of slope on W side of valley junction, 1.65 km NW of observation post at [SU 1187 5107], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1075 5228

Specimen nos: ARF 1502-1503

The specimens are indeterminate inoceramid bivalves.

Conclusion: None possible.

(149) Brash in tank track ruts, near base of hill on N side of Water Dean Bottom, 1.34 km SW of Vedette Point 13, Casterley, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1016 5274

Specimen nos: ARF 1504-1508

The fauna includes the bivalve *Mytiloides mytiloides*, in hard chalk.

Conclusion: Holywell Nodular Chalk Formation; Turonian, *Mytiloides* spp. Zone.

(150) Brash in mole hills, 90 m N of old pit, 1.07 km WSW of observation post [SU 1187 5107], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1083 5079

Specimen no.: ARF 1509

The specimen includes fragments of the bivalves *Platyceramus* and *Volvicceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(151) Brash in scrape in front of observation post 520 m WSW of observation post [SU 1121 5370], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1137 5098

Specimen no.: ARF 1510

The specimen includes fragments of the bivalves *Platyceramus* and *Volvicceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(152) Brash in scrape 200 m NW of observation post at [SU 1137 5098] and 600 m WNW of observation post at [SU 1121 5370], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1128 5113

Specimen no.: ARF 1511

The specimen includes fragments of the bivalves *Platyceramus* and ?*Volvicceramus involutus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(153) Brash in scrape under tree, S side of Water Dean Bottom, 600 m NNW of Observation Post at [SU 1121 5370], Wilts.

1:50 000 282 (Devizes)

NGR: SU 1174 5167

Specimen no.: ARF 1512

The specimen is the inoceramid bivalve *Inoceramus cuvieri*.

Conclusion: upper New Pit Chalk Formation or lower Lewes Nodular Chalk Formation; Turonian, upper *T. lata* Zone.

(154) Brash in track next to Observation Post on ridge S of Water Dean Bottom, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1121 5370

Specimen no.: ARF 1513

The specimen comprises shell fragments of the inoceramid bivalve *Platyceramus*.

Conclusion: ? Seaford Chalk Formation; Coniacian or Santonian; ? *M. coranguinum* Zone.

(155) Brash in field on top of flat crest, 1.45 km WSW of Enford church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1261 5142

Specimen no.: ARF 1514

The specimen includes fragments of the bivalves *Platyceramus* and ?*Volvicceramus involutus*.

Conclusion: ? lower Seaford Chalk Formation; ? Coniacian, ? lower *M. coranguinum* Zone.

(156) Brash in field by fence close to valley bottom, 0.5 km down valley from Enford Farm and 1.2 km SW of Enford church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1327 5071

Specimen no.: ARF 1515

The specimen is the echinoid *Micraster cortestudinarium*.

Conclusion: upper Lewes Nodular Chalk Formation; Coniacian, upper *M. cortestudinarium* Zone.

(157) Track section on tank track, NE side of valley, 700 m from tank crossing A, and 2.2 km NW of Enford church, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1283 5346

Specimen nos: ARF 1516 to 1519

The fauna comprises fragments of the bivalve *Mytiloides*, in hard chalk.

Conclusion: ? Holywell Nodular Chalk Formation; Turonian, ? *Mytiloides* spp. Zone.

(158) Track section near top of hill 270 m S of Widdington Farm and 1.1 km SE of Vedette Point 13, Casterley, Wilts.

1:50 000 282 (Devizes)

NGR: SU 1232 5334

Specimen no.: ARF 1520

The specimen is of the echinoid *Micraster cortestudinarium*?, in hard chalk.

Conclusion: ? upper Lewes Nodular Chalk Formation; ? Coniacian, ? *M. cortestudinarium* Zone.

(159) Track section near top of steep section, 270 m S of Widdington Farm and 1.25 km SE of Vedette Point 13, Casterley, Wilts.

1:50 000 282

NGR: SU 1239 5336

Specimen nos: ARF 1521 to 1524

The fauna comprises fragmentary specimens of the echinoids *Micraster* and *Echinocorys*. One of the *Echinocorys* has a very rounded shape, and the periplastron morphology of the *Micraster* specimens suggests assignment to the P.(S.) *plana* Zone.

Conclusion: lower to middle Lewes Nodular Chalk Formation; Turonian, *P. (S.) plana* Zone.

(160) Salisbury Plain, surface debris.

1:50 000 282 (Devizes)

NGR: SU 03798 46984

Specimen no: ARF 38

The specimen is a shell fragment of the inoceramid bivalve *Platyceramus*.

Conclusion: Seaford Chalk Formation or younger; Coniacian or Santonian, *M. coranguinum* Zone or younger.

(161) Salisbury Plain, surface debris.

1:50 000 282 (Devizes)

NGR: SU 05103 44119

Specimen no.: AJN 48

The specimen is a left valve fragment of the inoceramid bivalve *Volviceramus involutus*.

Conclusion: lower Seaford Chalk Formation; Coniacian, lower *M. coranguinum* Zone.

(162) Salisbury Plain, surface debris.

1:50 000 282 (Devizes)

NGR: ST 96103 46074

Specimen no.: AJN 51

The specimen includes shell fragments of the inoceramid bivalve *Platyceramus*.

Conclusion: Seaford Chalk Formation or younger; Coniacian or Santonian, *M. coranguinum* Zone or younger.

(163) Salisbury Plain Military Range. Exposure adjacent to Southern Transit Route, c. 400 m at 353° from Triangulation Point on Battlesbury Hill, Wilts.

1:50 000 281 (Frome)

NGR: ST 89940 45840 to 89870 46140

Specimen nos: WMD 9757; 9786 (micro-fossil samples)

The section exposes c. 3 m of Zig Zag Chalk Formation, overlain by c. 8 m of lower Holywell Nodular Chalk Formation (including Plenus Marls & Melbourn Rock) (Fig. 10).

Conclusion: upper Zig Zag Chalk Formation & basal Holywell Nodular Chalk Formation.

(164) 300 m NW of White Hill, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0001 5154

Specimen no.: KRB 192

The specimen is the bivalve *Plicatula inflata*, in creamy-grey chalk.

Conclusion: Grey Chalk Subgroup.

(165) 600 m at 80° from The Warren, 800 m W of Brazen Bottom Farm, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0109 5194

Specimen nos: KRB 193-194

The specimens comprise the brachiopod *Orbirhynchia cuvieri* and fragments of the inoceramid bivalve *Mytiloides* (including *M. ex. gr. mytiloides*) in hard chalk.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(166) Battlesbury Hill, Wilts.

1:50 000 281 (Frome)

NGR: ST 9016 4560

Specimen no.: KRB 195

The specimen is the bivalve *Mytiloides*, in hard chalk. The contact of the Zig Zag and Holywell Nodular Chalk occurs on the Southern Transit Road at the northern end of Battlesbury Hill ((163) above).

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(167) Northern end of Middle Hill cutting, Wilts.

1:50 000 281 (Frome)

NGR: ST 9073 4528

Specimen no.: KRB 196

The specimen is a terebratulid brachiopod in marly chalk.

Conclusion: None possible, but see (168) below.

(168) Middle Hill cutting, Wilts.

1:50 000 281 (Frome)

NGR: ST 9070 4521

Specimen nos: KRB 197-214

The fauna includes several terebratulid brachiopods (?*Concinnithyris subundata*); the bivalves *Inoceramus atlanticus* (several specimens), *I. pictus* (single specimen in marl), *Neithea* sp. and *Lyropecten* (*Aequipecten*) *beaveri*, and the ammonite ?*Acanthoceras rhotomagense*.

Conclusion: lower Zig Zag Chalk Formation; upper *A. rhotomagense* Zone, *T. acutus* Subzone and basal *A. jukesbrownei* Zone.

(169) Gore Cross Farm tank crossing 'D', Wilts.

1:50 000 282 (Devizes)

NGR: SU 0110 5133

Specimen no.: KRB 215

The specimen is the bivalve *Mytiloides* in hard, nodular chalk.

Conclusion: Holywell Nodular Chalk; Turonian, *Mytiloides* spp. Zone.

(170) 400 m NW of Urchfont Hill, Wilts.

1:50 000 282 (Devizes)

NGR: SU 0435 5572

Specimen no.: KRB 216

The specimen is the brachiopod *Orbirhynchia cuvieri* ?, in hard chalk.

Conclusion: ? Holywell Nodular Chalk; Turonian, ?*Mytiloides* spp. Zone.

(171) Bomb crater on Westdown Artillery Range, Wilts.

1:50 000 282 (Devizes)

NGR: SU 06305 52461

Specimen no.: LLB 1

The specimen is a fragment of the bivalve *Spondylus* sp.

Conclusion: None possible.

(172) Bomb crater on Westdown Artillery Range, Wilts.

1:50 000 282 (Devizes)

NGR: SU 05165 51347

Specimen no.: LLB2

The specimen is a fragment of the ammonite *Scaphites* sp.

Conclusion: None possible.

(173) Bomb crater on Westdown Artillery Range, Wilts.

1:50 000 282 (Devizes)

NGR: SU 05775 51214

Specimen no.: LLB3

The specimen is an indeterminate inoceramid shell fragment.

Conclusion: None possible.

(174) Bomb crater on Westdown Artillery Range, Wilts.

1:50 000 282 (Devizes)

NGR: SU 05298 51269

Specimen no.: LLB 4

The specimen is the bivalve *Spondylus* sp., in hard chalk.

Conclusion: None possible.

(175) Rabbit burrow, Stoke Hill Farm, Wilts.

1:50 000 282 (Devizes)

NGR: ST 95303 51873

Specimen nos: LLB 5-6

The specimens are part and counter-part of the bivalve *Mytiloides* sp., in hard chalk.

Conclusion: ? Holywell Nodular Chalk; Turonian, ? *Mytiloides* spp. Zone.

(176) Westdown Artillery Range, Wilts.

1:50 000 282 (Devizes)

NGR: SU 05033 51446

Specimen no.: LLB 7

The specimen is a fragment of a phosphatised sponge.

Conclusion: None possible.

(177) Bomb crater, Grove Down, Wilts.

1:50 000 282 (Devizes)

NGR: SU 05384 50990

Specimen no.: LLB 8

The specimen is an indeterminate inoceramid hinge fragment.

Conclusion: None possible.

(178) Erlestoke cricket ground, Wilts.

1:50 000 282 (Devizes)

NGR: ST 96204 53654

Specimen no.: LLB 9

The specimen is a large example of the oyster *Amphidonte obliquatum*, in soft, glauconitic sand. *A. obliquatum* is long-ranging, but large specimens are common in the Upper Greensand, particularly the lower (less consolidated) part of the Shaftesbury Sandstone Member.

Conclusion: Upper Greensand Formation.

(179) Bomb crater, Prospect Clump, Wilts.

1:50 000 282 (Devizes)

NGR: SU 07448 49483

Specimen no.: LLB 10

The specimen is a fragment of the bivalve *Cremnoceramus crassus*?

Conclusion: ? upper Lewes Nodular Chalk; Coniacian, ? *M. cortestudinarium* Zone.

(180) Bomb crater, Summer Down, Wilts.

1:50 000 282 (Devizes)

NGR: SU 07284 50640

Specimen no.: LLB 11

The specimen is a fragment of the bivalve *Cremnoceramus*?

Conclusion: ? upper Lewes Nodular Chalk Formation or ?basal Seaford Chalk Formation.

(181) Edington, Wilts.

1:50 000 281 (Frome)

NGR: ST 93801 52942

Specimen no.: LLB 12

The specimen is a fragment of the bivalve *Inoceramus pictus* in creamy-grey chalk.

Conclusion: Zig Zag Chalk Formation; Cenomanian.

(182) Brash.

1:50 000 281 (Frome)

NGR: ST 93492 50973

Specimen nos: LLB 13-14

The specimens are part and counter-part of the bivalve *Mytiloides*, in very hard chalk.

Conclusion: ? Holywell Nodular Chalk Formation; Turonian, ?*Mytiloides* spp. Zone.

(183) Edington, Wilts.

1:50 000 281 (Frome)

NGR: ST 93389 52876

Specimen no.: LLB 15

The specimen is the brachiopod *Grasirhynchia grasiana*.

Conclusion: West Melbury Marly Chalk Formation or Zig Zag Chalk Formation.

(184) Edington, Wilts.

1:50 000 281 (Frome)

NGR: ST 93840 52940

Specimen no.: LLB 16

The specimen is the bivalve *Inoceramus pictus*, in creamy-grey chalk.

Conclusion: Zig Zag Chalk Formation; Cenomanian.

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Most of the references listed below are held in the Library of the British Geological Survey at Keyworth, Nottingham. Copies of the references may be purchased from the Library subject to the current copyright legislation.

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Lithostratigraphy		Stage	Zone
White Chalk Subgroup	Newhaven Chalk Fmn. (pars)	SANTONIAN	<i>M. testudinarius</i>
			<i>U. socialis</i>
	Seaford Chalk Fmn.	CONIACIAN	<i>M. coranguinum</i>
	Lewes Nodular Chalk Fmn.		<i>M. cortestudinarium</i>
	New Pit Chalk Fmn.	Turonian	<i>P. (S.) plana</i>
			<i>T. lata</i>
Holywell Nodular Chalk Fmn.	Cenomanian	<i>Mytiloides</i> spp.	
		<i>N. juddii</i>	
Grey Chalk Subgroup	Zig Zag Chalk Fmn.		<i>M. geslinianum</i>
			<i>C. guerangeri</i>
			<i>A. jukesbrownei</i>
	West Melbury Marly Chalk Fmn.		<i>A. rhotomagense</i>
			<i>C. inerme</i>
		<i>M. dixoni</i>	
		<i>M. mantelli</i>	

Chalk Rock

Gun Gardens Main Marl / Lulworth Marl

Melbourn Rock

Plenus Marls

Cast Bed

Glauconitic Marl Member

TABLE 1. The stratigraphy referred to in this report

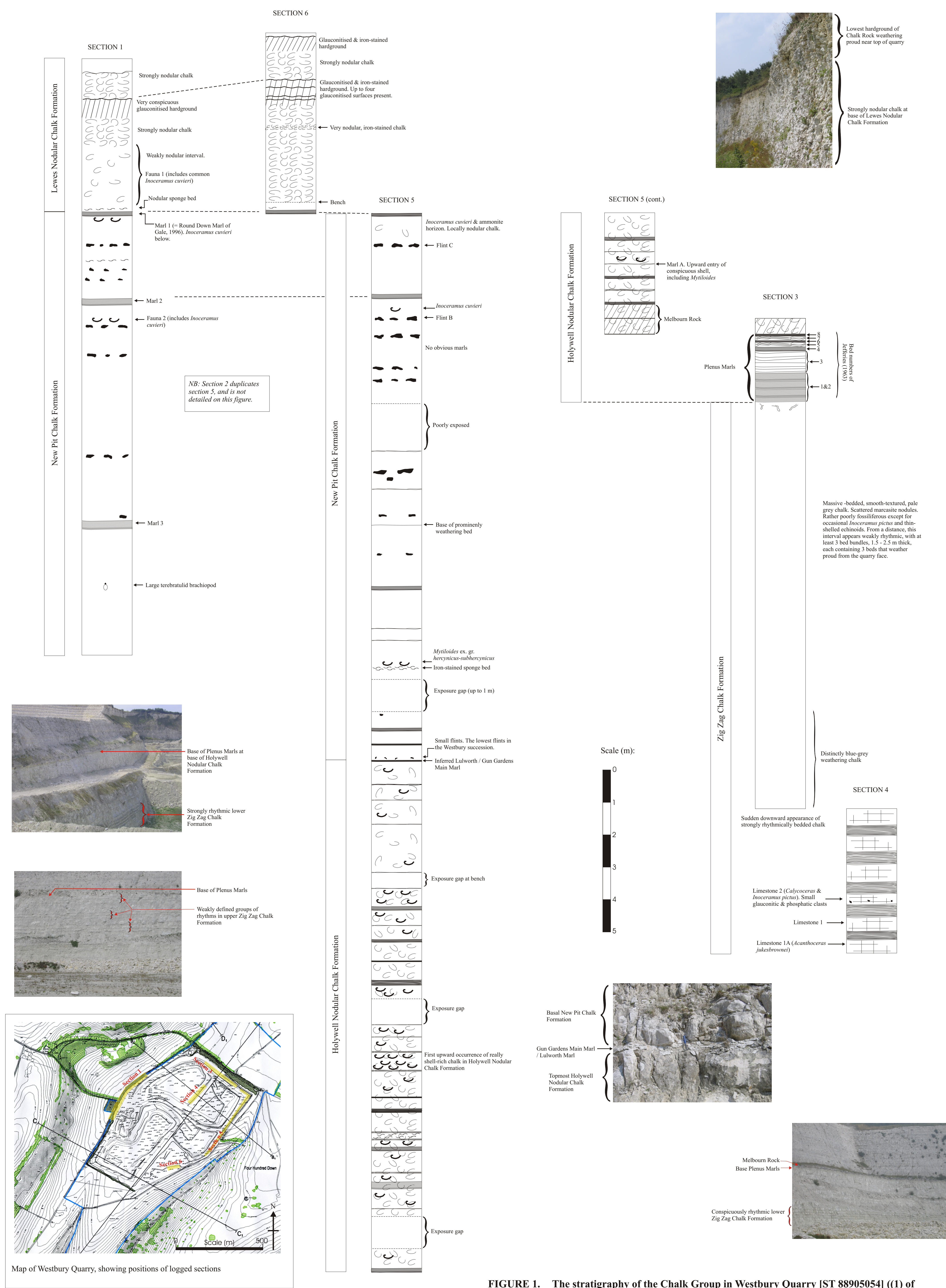


FIGURE 1. The stratigraphy of the Chalk Group in Westbury Quarry [ST 88905054] ((1) of report).

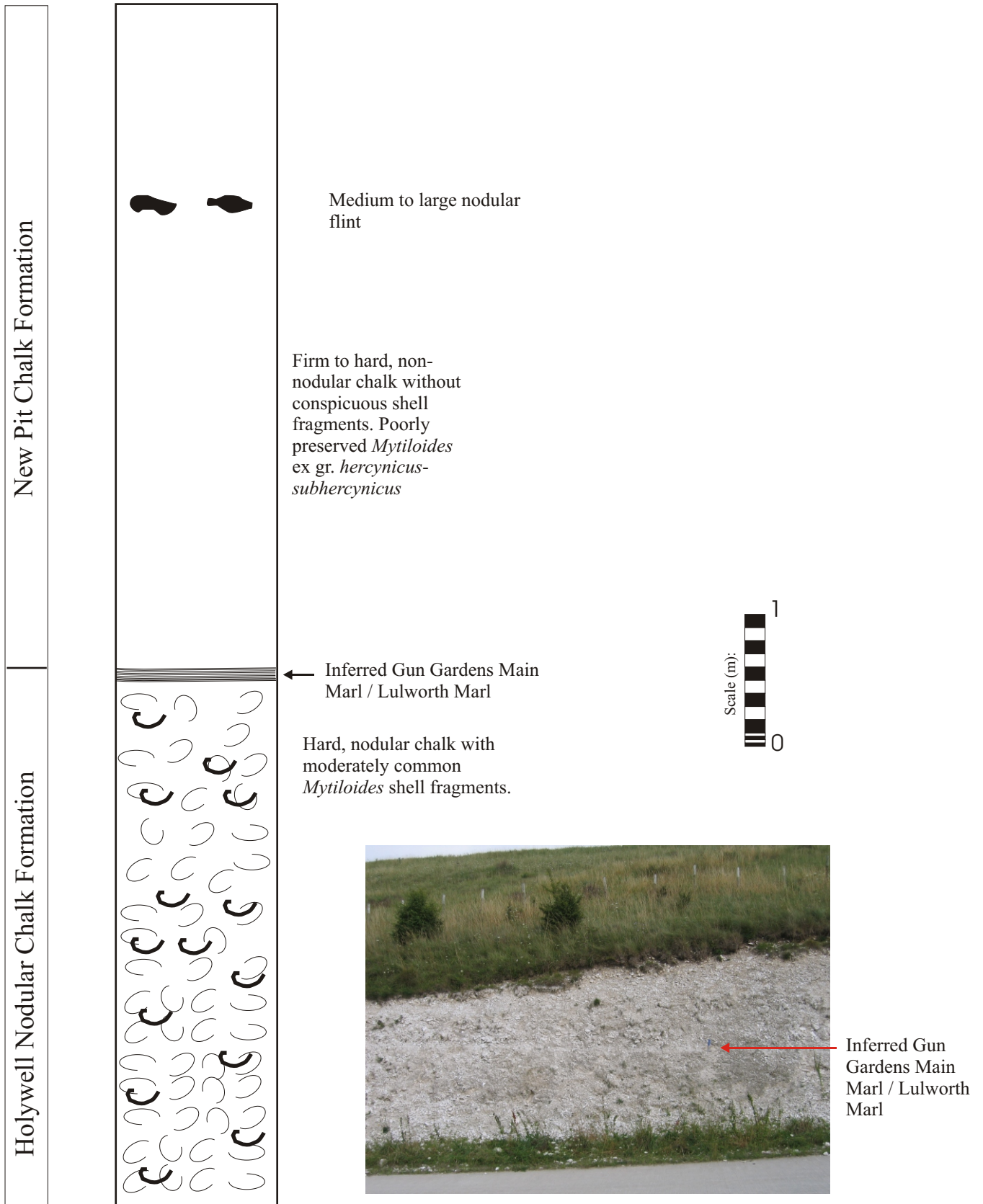


FIGURE 2. The Holywell Nodular Chalk and New Pit Chalk formations at [ST 9360 4496 - 9354 4474] ((10) of report).

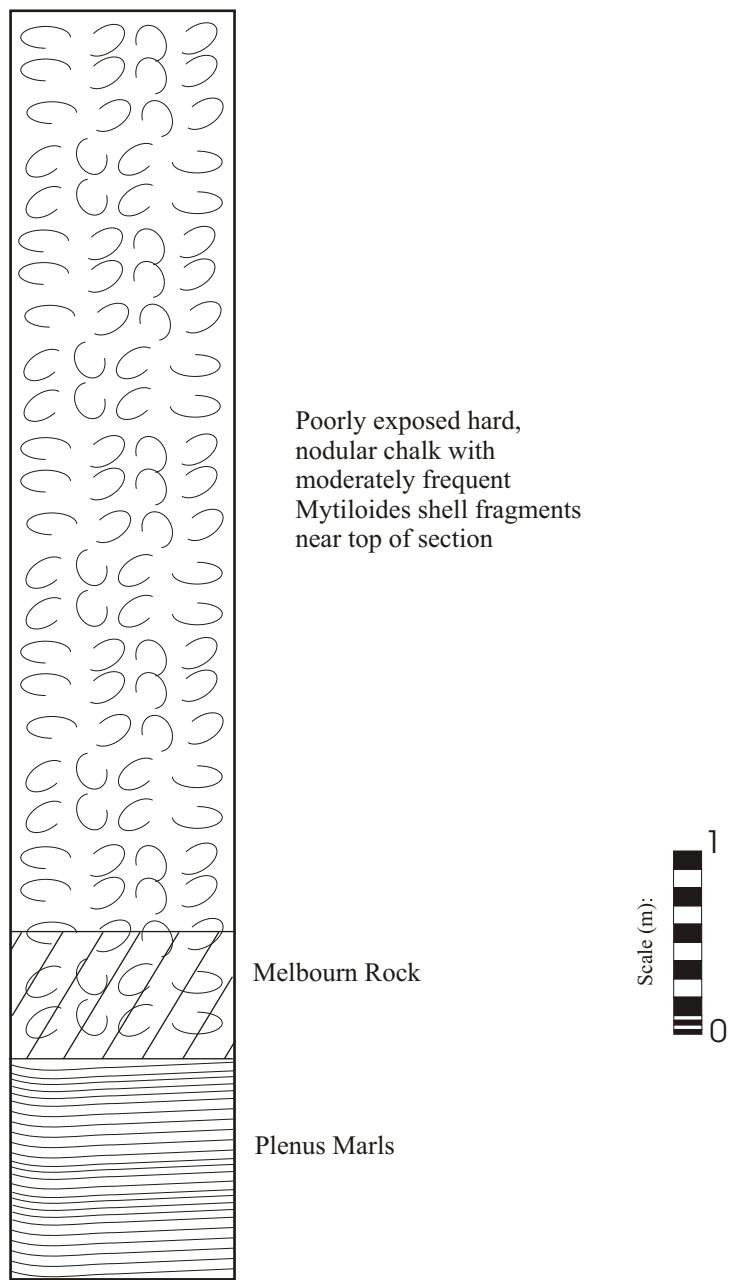


FIGURE 3. The Holywell Nodulalk Formation at [ST 9246 4510 - 9302 4494] ((12) of report).

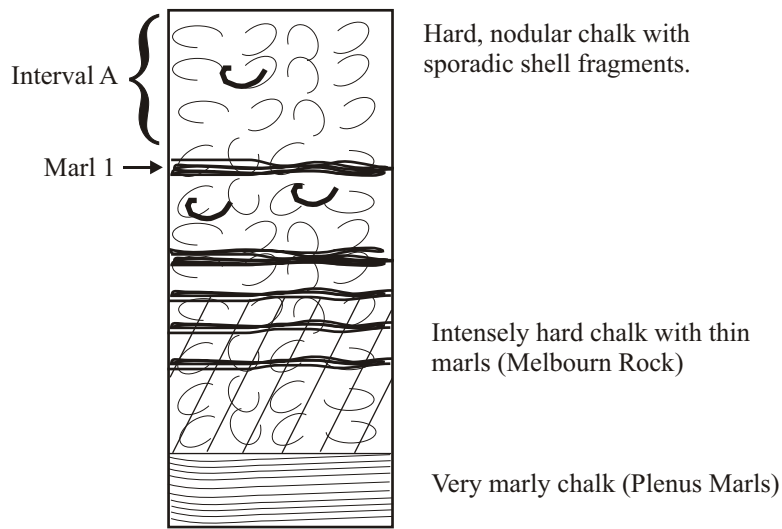


FIGURE 4. The Holywell Nodular Chalk Formation at [SU 0588 5592] ((17) of report).

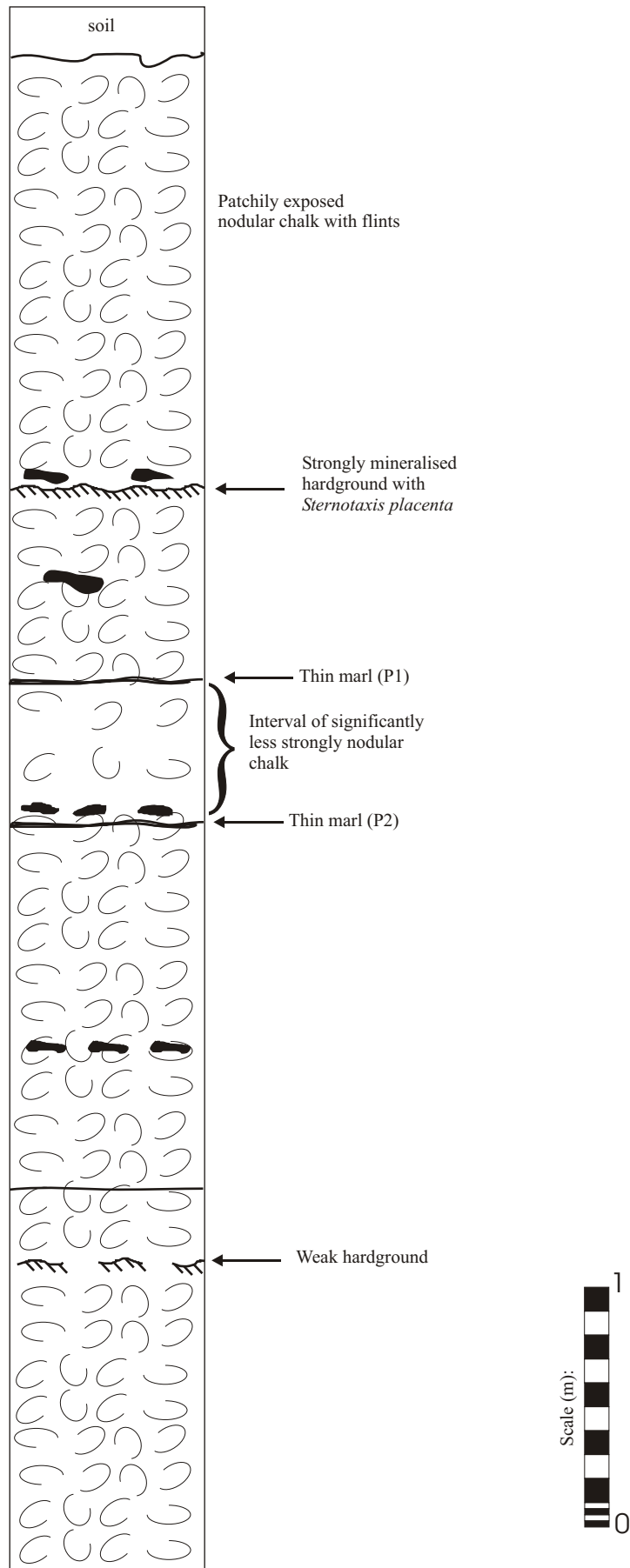
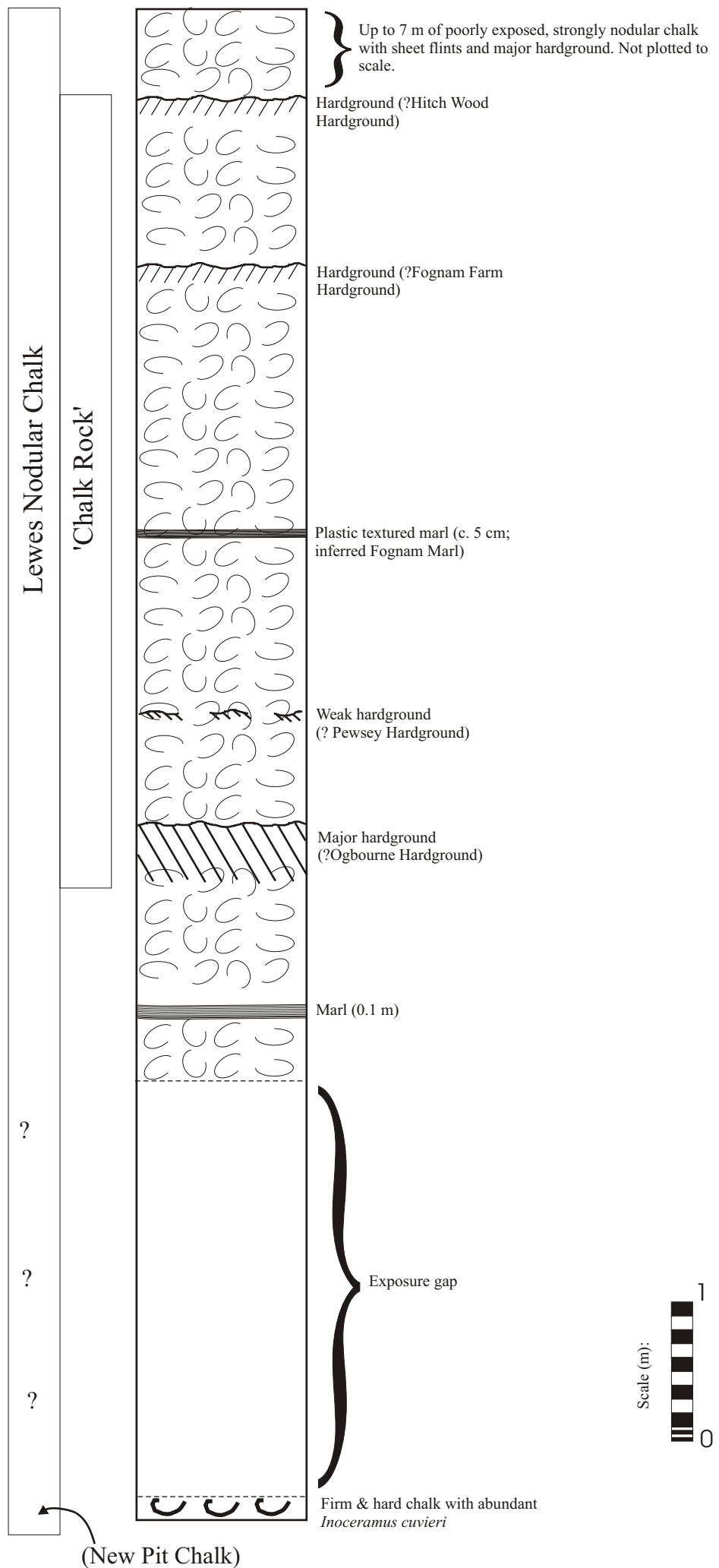


FIGURE 5. The Lewes Nodular Chalk Formation at [ST 98088 36894] ((18) of report).

FIGURE 6. The topmost New Pit Chalk Formation and Lewes Nodular Chalk Formation at SU 0376 3226 ((19) of report)



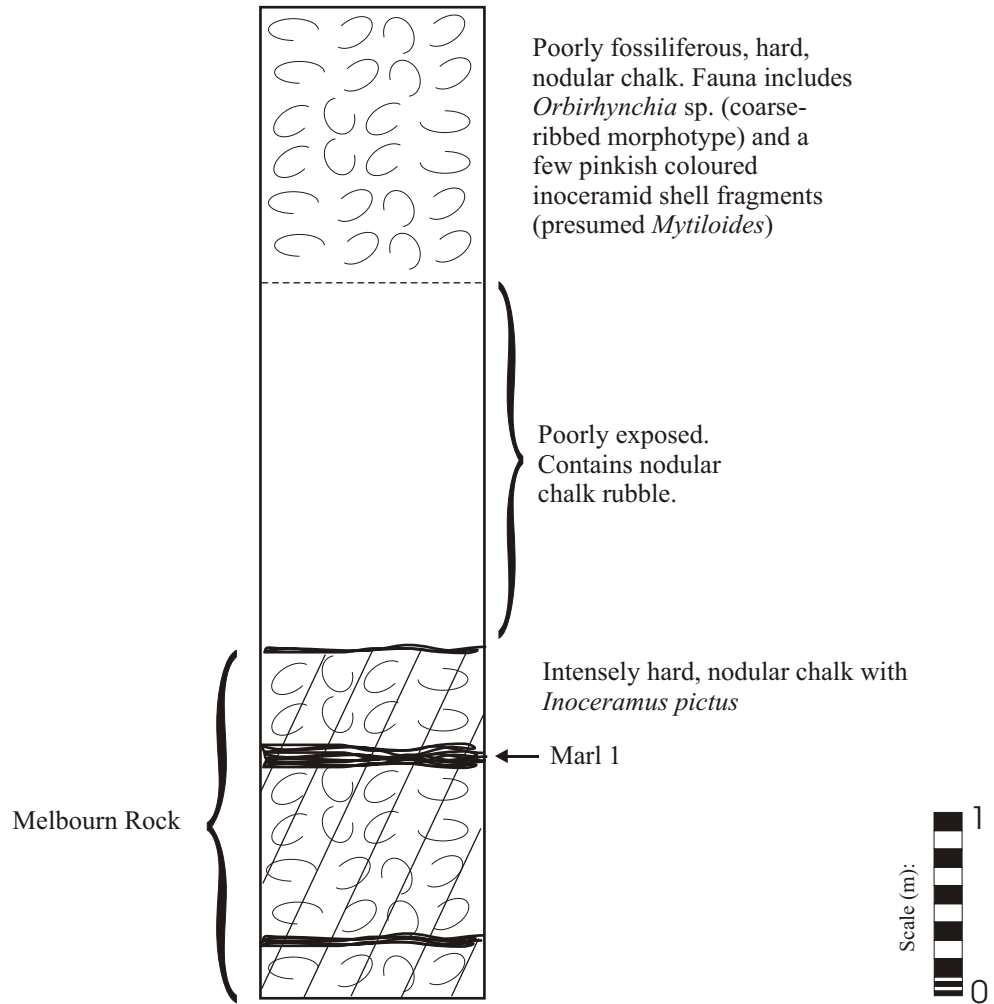


FIGURE 7. The Holywell Nodular Chalk Formation at [ST 98182 52251] ((21) of report).

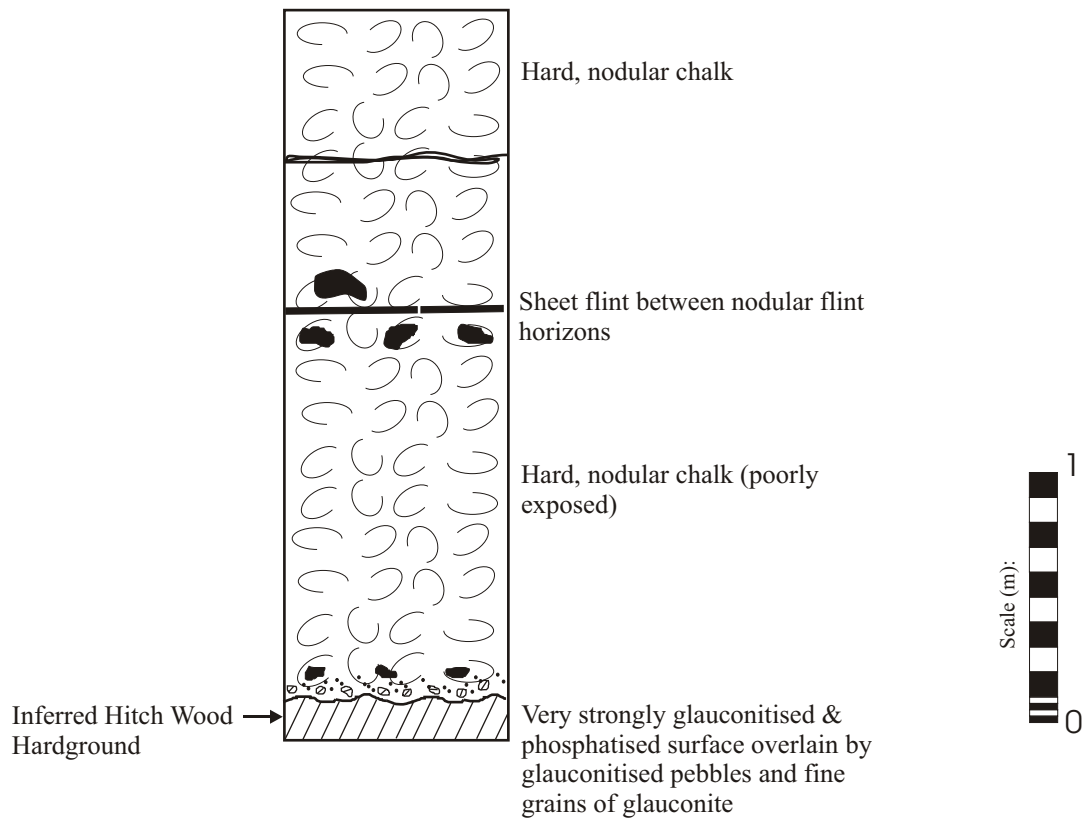


FIGURE 8. The Lewes Nodular Chalk Formation at [ST 97470 48501] ((26) of report).

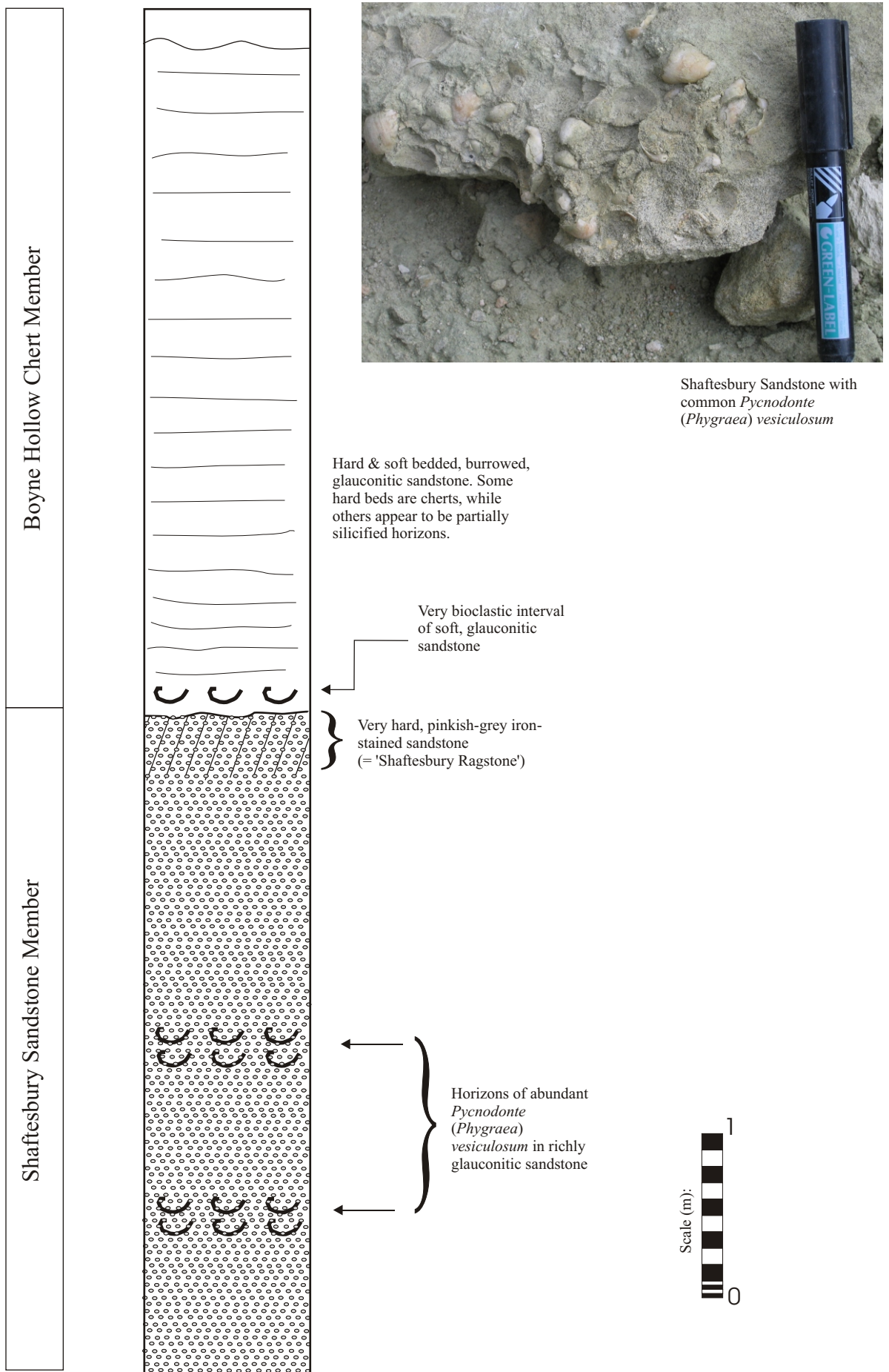


FIGURE 9. The Upper Greensand Formation at SU 0504 2990 ((36) of report)

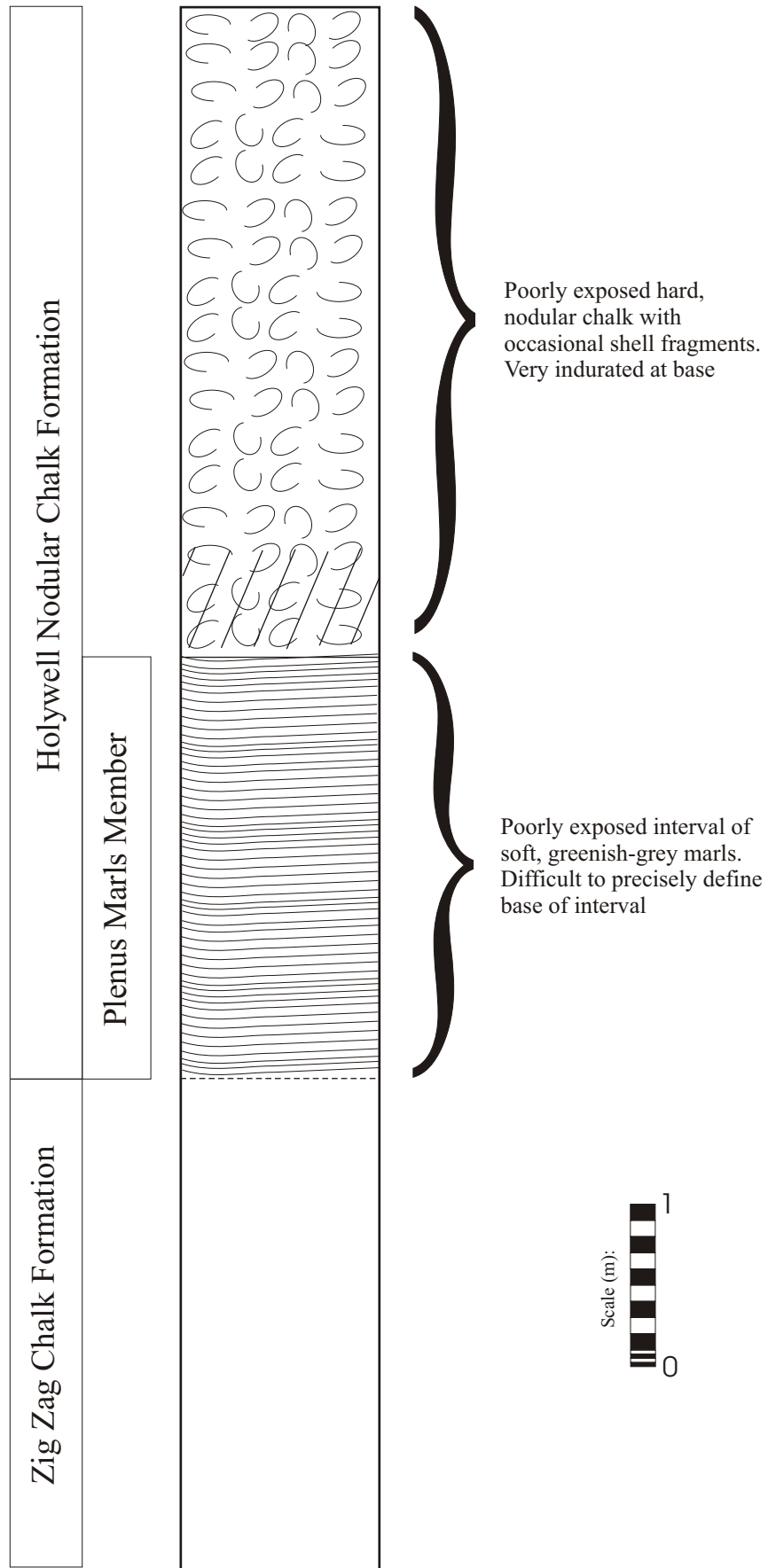


FIGURE 10. The Chalk succession at [ST 89940 45840 - 89870 46140] ((163) of report).