

LETTERS TO THE EDITOR

5th January 1982

Dear Sir:

"My attention has just been drawn to a paper by D.D.J. Antia entitled "The Temeside Bone Bed and associated sediments from Wales and the Welsh Borderland" published in *Mercian Geologist* (Vol. 8, No. 3, 1981) which contains an appendix "Pridiolian (sic) marine fossils from the supposedly Lower (sic) Ludfordian (Ludlovian) Cennan (sic) Beds of the Cennan (sic) Valley" (Appendix 2, p. 207). In this appendix my name appears as first author. I wish to make it quite clear that this is the first time I have seen the article in its present form. I wish to disassociate myself completely from it. This appendix contains numerous factual and spelling errors.

The object of this so-called supplementary study was not to demonstrate that the Cennan (note correct spelling) Beds were of one age rather than another; it was a conclusion that Dr. Antia came to after I drew his attention to a sample I had collected as part of my PhD work. I accepted his fossil identifications and their implied age for these sediments in good faith.

The published paper is virtually identical to a manuscript rejected by the *Geological Magazine*. I accepted the criticisms that were levelled at this document regarding the questionability of the identifications and their apparent age. When I attempted to check the identifications I was told by the then Mr. Antia that he could not find the specimens! I naturally considered the matter closed. You can therefore imagine my amazement and outrage that he has resurrected this erroneous and misleading manuscript and appended it to his paper with my name still attached! I am even more amazed that no one on the staff of the *Mercian Geologist* sent me proofs or even a copy of the paper prior to publication as I am listed as first author. If this had been done I would have objected to it being published with my name attached.

I demand this letter be published in the *Mercian Geologist*, with an appropriate apology, at the earliest opportunity. Otherwise I will be forced to take legal action to protect my professional reputation."

Yours faithfully,
Dr. David R. Atkins
Exploration Division
The British National Oil Corporation
150 St. Vincent Street
GLASGOW

Reference

ATKINS, D.R. &
ANTIA, D.D.J.

1981. Appendix 2, p. 207, in: Antia, D.D.J., 1981. The Temeside Bone Bed and associated sediments from Wales and the Welsh Borderland. *Mercian Geol.*, Vol. 8, Pt. 2, pp. 163-215.

23rd December 1981

Dear Sir:

"D.D.J. Antia, in a recent paper "The Temeside Bone-Bed and associated sediments from Wales and the Welsh Borderland" published in *Mercian Geologist* (Vol. 8, no.3, 1981), included an appendix written jointly with D.R. Atkins entitled "Pridiolian [*sic*] marine fossils from the supposedly Lower [*sic*] Ludfordian (Ludlovian) Cennan [*sic*] Beds of the Cennan [*sic*] Valley" (Appendix 2, p. 207). They claim to have collected an ostracod assemblage consisting of *Frostiella groenvalliana* Martinsson, ?*Frostiella*, *F.* cf. *bicristata* Shaw, *Londinia kiesowi* (Krause), *Hermannia* [*sic*] cf. *marginata* (Jones) [*sic*] and ?*Nyhamnella* sp. from the Cennan [*sic*] Beds which proves a Downtonian (Pridiolian) [*sic*] age, not Upper [*sic*] Leintwardinian (Lr. [*sic*] Ludfordian) as suggested by us (Squirrell and White 1978). According to Antia and Atkins, the collection was obtained from a road cutting (NGR SN 6102 1906), 4km south-west of Llandeilo, Dyfed, about 0.56m above the base of the unit.

The National Grid Reference confirms that Atkins and Antia are referring to the Cennan Beds of our account. During our investigations we made large collections from the Cennan Beds, and details of the fauna are listed in our published account (Table 3, p. 8). *F. groenvalliana* or a closely related form is common, a species which hitherto has been recorded solely from the Downton Series. However, the evidence and reasons for concluding that the Cennan Beds represent an extremely attenuated sequence of late Leintwardinian and possibly Whitcliffian age (i.e. mid- to late Ludfordian, following Holland, Lawson, Walmsley and White 1980) are fully discussed (pp. 8, 9, 14, 15). Earlier, Potter and Price (1965) had also concluded that these strata represent an attenuated late Ludlow sequence.

Subsequent to the publication of our account, Dr. R. Turner, formerly of IGS Leeds, reported to us that from a sample taken at 1.3 m above the base of the Cennan Beds he had obtained a "moderately abundant assemblage of reasonably well preserved acritarchs" which "clearly indicates a Ludlovian age for the sample" and that a Whitcliffian age is most probable. Recently, Mr. K. Dorning, Pallab Research, Sheffield, informed us that a sample he investigated from the Cennan Beds indicates an age equivalent to that of the Upper Leintwardine Beds or low Lower Whitcliffe Beds of the Ludlow area, Shropshire.

Atkins' and Antia's publication is both misleading and unscientific, since no reference is made to the information given in our paper, nor to our reasons for regarding the Cennan Beds as being of late Ludlow rather than Downton age, a decision supported by the micro-fossil evidence, as mentioned above. Furthermore, their records of typical Downton Series ostracods not found in our collections cannot now be substantiated, because we have been informed that their collection has been lost. In the circumstances, we see no reason for changing our published interpretation of the age of these strata.

We do not wish to embarrass you further by listing all the errors in the poorly presented Appendix 2 of Antia's publication. May we also point out that absence of comment here on other parts of the paper should not be taken to imply that we accept any of it?"

H. C. Squirrell
D. E. White
Institute of Geological Sciences
Exhibition Road
London SW7 2DE

References

ATKINS, D.R. &
ANTIA, D.D.J.

1981. Appendix 2, p. 207, in: Antia, D.D.J., 1981. The Temeside Bone-Bed and associated sediments from Wales and the Welsh Borderland. *Mercian Geol.*, Vol. 8, Pt. 2, pp.163-215.

HOLLAND, C.H., LAWSON, J.D., 1980. Ludlow Stages. *Lethaia*, Vol. 13, p. 268.
WALMSLEY, V.G., & WHITE, D.E.

POTTER, J.F., & PRICE, J.H. 1965. Comparative sections through rocks of Ludlovian-Downtonian age in the Llandovery and Llandeilo districts. *Proc. Geol. Assoc.*, Vol. 76, Pt. 4, pp.379-402.

SQUIRRELL, H.C. & WHITE, D.E. 1978. Stratigraphy of the Silurian and Old Red Sandstone of the Cennen Valley and adjacent areas, south-east Dyfed, Wales. *Rep. Inst. Geol. Sci.*, No. 78/6.

29th December 1981

Dear Sir:

"The long paper by D.D.J. Antia in the *Mercian Geologist* vol.8 no. 3 (1981) is on the important subject of the Temeside Bone-Bed and the associated sediments. It is therefore likely to be taken seriously, particularly by readers overseas. Although I am familiar with both the rocks and the region concerned I find parts of the paper very confusing and I imagine many geologists abroad will be even more confused. I will restrict my criticism to the following nine points.

1. The numerous spelling errors (e.g. Cennan for Cennen, *Lerpiditia* for *Leperditia*, *Leodispis* for *Ledopsis*, *N. sissica* for *N. scissa*, *Aegeria* for *Aegiria*, etc.) might be considered as irritatingly careless rather than misleading but it is deplorable that the important series name Pridoli (more correctly Pridoli) is misspelt throughout as Pridioli - particularly as I corrected this error in the early draft of the paper.

2. More serious, especially for overseas visitors, are the incorrect map references, particularly where they are not accompanied by an adequate description or map of the locality. For instance, Onibury is 8 km. N.W. of the given map reference SO 520.742 and Ludlow railway cutting is 6 km. W. of SO 574.748 (both on p. 165). On p. 166 there is a full-page diagram vaguely located as "Downton" with a map reference of SO 456.742, indicating a position in the fields about 1 km. E. of the well-known Downton Castle Bridge localities.

3. Even more serious is the assertion by Antia (p.168, para. 1) that the occurrence of *Ozarkodina remscheidensis* in the Temeside Bone-Bed indicates the position of the Silurian-Devonian boundary in the Welsh Borderlands. The use of the phrase "earliest known occurrence" implies that there are later occurrences of this species in the region but I have not seen them reported. I understand, however, that Antia's record of this important conodont species is based on a single element only, a fact not stated by him in his papers. I also understand, from discussions with several Silurian-Devonian conodont experts, that this find, in isolation, has little or no value in locating the base of the Devonian in Britain. I recall warning Dr. Antia that his discovery was not as significant as he (and I) first hoped but this has evidently failed to deter him from postulating a correlation inadequately supported by the evidence.

4. In para. 2 on p.168, Antia correctly points to the international popularity of the name Pridoli for the fourth series of the Silurian but is incorrect in assuming that the name Downton is no longer a contender for this honour. There has recently been increasing support abroad for the use of this classic British term and the Subcommittee on Silurian Stratigraphy is presently receiving and considering submissions on the names Downton, Pridoli and Skala before a decision is made on the nomenclature and stratotypes for the fourth series of the Silurian System. I should have thought that Dr. Antia was well aware of these activities, either from a circular which he received from me or by careful reading of one of the references listed in his paper i.e. Holland 1980, p.238, line 29.

5. Referring to para. 4 on p.168 of Antia's paper, it should perhaps be made clear that the decision to reduce the Ludlow stages from four to two was taken by the Silurian Subcommittee and not by Holland, Lawson, Walmsley and White. Their main function was to propose suitable names for the two new stages. The overriding consideration in the decision by the Subcommittee was the potential of these two stages for international usage as their bases correspond very closely to the bases of the widespread graptolite zones of *Neodiversograptus nilssoni* and *Saetograptus leintwardinensis* respectively.

6. On p.169, para. 5, Antia states that it has been shown conclusively by Kaljo that the base of the Pridoli Series extends into the topmost Ludlovian. This is far too dogmatic a statement. A paper in press on "The Downton Series as the fourth Series of the Silurian System" by Bassett, Lawson and White includes a chapter on international correlation compiled with the assistance of Dr. Kaljo himself plus Professor Martinsson (ostracodes) and Dr. Teller (graptolites). The detailed discussion of the palaeontological evidence now suggests that the bases of the Downton and Pridoli Series may, after all, be of approximately the same age. Even if Kaljo's 1978 correlation is correct, Antia's proposed restriction of the term Ludfordian to exclude the highest Ludlow strata is not justified because the Pridoli has not been internationally approved as the name of the fourth series. Indeed, one strong argument in favour of the use of the term Downton is that its adoption would preserve the long-established scope of the internationally recognised Ludlow Series.

7. Para. 6 on p.169 and Table 1 in Antia's paper present a new and "clarified" lithostratigraphy for the upper part of the Ludlow Series. Holland *et al.* (1963) established 9 mappable subdivisions of the Ludlow rocks which have stood the test of time. Only very recently (Holland *et al.* 1980), these divisions were given the designation "Formation" instead of "Beds". Antia retains these units as members and introduces new formation and group names. His scheme is logical and his names attractive and appropriate; his reason for grouping the Lower and Upper Whitcliffe Beds into the same formation is a good one - except that on these grounds perhaps the lithologically similar Lower and Upper Leintwardine Beds should also be included. Nevertheless, it seems irresponsible and confusing to introduce a rival classification so soon after a long-standing scheme has been up-dated and ratified, unless it can be demonstrated that the present classification results in serious inconvenience.

8. The most confusing part (to me) of Antia's Temeside tale comes on p.172, where he states that the Temeside Formation appears to be absent at Downton - contrary to "a widely held belief". Elles & Slater, the founders of the Temeside Shales, stated clearly (1906, p.199) that "The Temeside Group, as its name denotes, is well exposed along the banks of the Teme, both at Ludlow and in the neighbourhood of Downton Castle; it comprises beds which are virtually passage-beds into the Old Red Sandstone, and may be subdivided into the Downton-Castle or Yellow Sandstones below, and the Temeside Shales above." The name Temeside Shales or Formation is in general use for the predominantly olive-green sediments between the yellowish Downton Castle Sandstone Formation and the mainly red Ledbury Formation; the Temeside Bone-Bed is the name given to the most prominent bone-bed in that formation. It thus comes as a shock to see that Antia in his Text-fig. 4 (p.173) places what is virtually Elles & Slater's type section for their Temeside Shales and Temeside Bone-Bed into the Ledbury Formation, especially as he agrees on the grey and olive-green colours of the sediments. Perhaps the presence of red clays and silts below the green strata persuaded (or misled) him, but surely some explanation and discussion is called for? As for the Downton area, Elles & Slater (pp.211-214) clearly describe typical Temeside Shales at several localities, presumably not visited by Antia. Temeside Shales have also been seen at Downton (not merely "believed in", to quote Antia's quaint terminology) by Holland *et al.* (1963, p.135), Whitaker (1962, p.338), Allen (1974, p.133, fig.24) and many other geologists including myself. Another curious statement by Antia is that King & Lewis's (1912) canal sections in the Birmingham area are no longer accessible. The Brewin's Bridge canal section near Netherton was well exposed and easily accessible in 1974. Has Dr. Antia personally visited this locality and, if so, what has happened to make it inaccessible? The same question may be put about the section near Ludlow station as I presume the railway cutting still exists but perhaps the section is overgrown?

9. As I am mentioned in the Acknowledgements (p.201) as having read all or part of the manuscript I hasten to make it clear that I read it only in its thesis form and that I made some major criticisms which have been ignored in this subsequent paper. Many of the other items which I find confusing have been added at a later stage.

In conclusion, I must stress that this paper contains much potentially valuable data and some significant conclusions. The presence of such inaccurate or inadequate statements as I have criticised above is therefore doubly unfortunate as the reader is liable to lose faith in those parts of the paper which he is less competent to assess. I now find myself asking such questions as: How reliable is the sedimentology? Are the fossil identifications correct? Did Dr. Antia really collect and count 305,008 plant fragments (p.167)? Is there really such a fossil as *Hypermania* sp. (p.199) or is this a Freudian slip?"

Yours sincerely,

J.D. Lawson
Dept. of Geology
University
Glasgow G12 8QQ

References

- ANTIA, D.D.J. 1981. The Temeside Bone-Bed and associated sediments from Wales and the Welsh Borderland. *Mercian Geol.*, vol. 8, pp.163-215.
- ELLES, G.L. & SLATER, I.L. 1906. The highest Silurian rocks of the Ludlow District. *Q. Jl. geol. Soc. Lond.*, vol.62, pp.195-222.
- HOLLAND, C.H. 1980. Silurian Series and Stages: decisions concerning chronostratigraphy. *Lethaia*, vol.13, p.238.
- HOLLAND, C.H., LAWSON, J.D. & WALMSLEY, V.G. 1963. The Silurian rocks of the Ludlow District, Shropshire. *Bull. Br. Mus. (Nat. Hist.) Geol.*, vol.8, pp.95-171.
- HOLLAND, C.H., LAWSON, J.D., WALMSLEY, V.G. & WHITE, D.E. 1980. Ludlow Stages. *Lethaia*, vol.13, p.268.

Corrections

The following corrections should be made in D.D.J. Antia's paper: The Temeside Bonebed and associated sediments from Wales and the Welsh Borderland, published in the last issue of the *Mercian Geologist*, vol.8, no.3, pp.163-216.

Cennan	should read	Cennen.	Summary p.163, pp. 168, 201, 207.
Pridioli	" "	Pridoli.	pp. 163, 168, 169, 170, 171, 207.
<i>Lerpiditia</i>	" "	<i>Leperditia</i> .	p.165.
<i>Leodispis</i>	" "	<i>Ledopsis</i> .	pp. 175, 190, 193, 194, 198.
<i>N. sissica</i>	" "	<i>N. scissa</i> .	p.199.
<i>Aegeria</i>	" "	<i>Aegiria</i> .	p.198.
SO 520742	" "	SO 455794.	p.165, as on p.182, which is correct.
SO 574748	" "	SO 514748.	p.165.
<i>Hypermania</i>	" "	<i>Hyperammia</i> .	p.199.

Apology

The above errors are referred to in the letters on the previous pages. In addition to these points, Dr. Atkins implies that proofs of Appendix 2, should have been sent to him by the Editor. All the correspondence for the Antia paper, which includes the appendix referred to, was carried out with Dr. Antia, who submitted the complete manuscript in the first instance and received referees and editorial comments and in due page proofs. As the article was lengthy (53 pages), and alterations numerous, two sets of proofs were looked at by Dr. Antia. The appendix, consisting of 1 page (p.207), was included with the rest of the proofs. I assumed that Dr. Antia would have contacted his co-author for that page and he assumed I sent one to Dr. Atkins direct. I very much regret that Dr. Atkins did not, in fact, see either proof copy. The only address we had for Dr. Atkins was that given at the top of p.207. Nevertheless I accept Dr. Atkins' point; I should have insisted that the relevant page at least was forwarded to Dr. Atkins. Even if he had withdrawn as author (part) from the appendix as a consequence, he would have corrected a large proportion of the spelling errors noted above.

We hereby publish the apology demanded by Dr. Atkins and very much regret that he did not see the page referred to before publication.

A reply to all correspondence has been received from Dr. Antia. Unfortunately, proof pages have not been prepared in time for this issue. They will appear in the next issue, vol.9, no.1. Further delay would have meant that vol.8, no.4 would not have been published until September.

F.M. Taylor,
Editor.