

## CORRESPONDENCE

### THE SILURO-DEVONIAN BOUNDARY

We regret that, in printing, two of the references given by Dr. J. R. Earp in his letter (104 (4), 1967) were incompletely cited. Details for these are:—

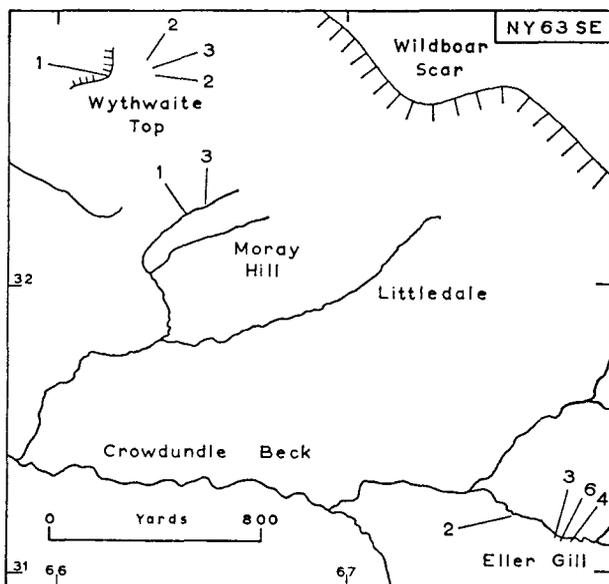
JONES, O. T., 1929. In *Handbook of the Geology of Great Britain*. Edit. Evans and Stubblefield, London.

POTTER, J. F., and J. H. PRICE, 1965. Comparative Sections through Rocks of Ludlovian-Downtonian Age in the Llandovery and Llandeilo Districts. *Proc. Geol. Ass.*, 76, 379–402.

### MICROFOSSILS FROM THE SKIDDAW GROUP

SIR,—A profuse assemblage of microfossils (acritarchs, chitinozoa, scolecodonts) has been extracted recently from the mudstones and siltstones of the Skiddaw Group, exposed in the northern part of the Cross Fell Inlier, in Cumberland (Text-fig. 1). The new assemblage is the first to be separated from rocks of the Skiddaw Group, although microfossils have been recorded from one locality on the Isle of Man, by Downie and Ford (1966), indicating an Arenig age for part of the Manx Slates.

The Skiddaw Slates in the inlier have previously been divided into Milburn beds and Ellergill beds on lithological grounds by Shotton (1935), and these sub-divisions have yielded well-documented graptolite collections described by Elles (1898), from the *D. bifidus* zone of the Ordovician. The type sections of both sub-divisions were recently sampled, around Wythwaite Top and Eller Gill respectively, and well-preserved microfossils were obtained. The proportion of useful samples to total number of samples collected was surprisingly high at 90 per cent, although minor intrusions and large faults



TEXT-FIG. 1. The number of specimens for microfossil analysis collected at each sampling locality in the Cross Fell inlier.

were avoided during sampling. This suggests that the parent rock has remained relatively unaltered, since microfossil preservation is sensitive to subsequent diagenetic or metamorphic processes.

The following species have been identified, although the list is not exhaustive :—

<i>Acritarchs.</i>	<i>Ranges.</i>
<i>Baltisphaeridium longispinosum</i> Eisenack	B <sub>2</sub> –D <sub>2</sub> Baltic.
<i>f. filifera</i> Eisenack	
<i>B. multipilosum</i> Eisenack	B <sub>2</sub> –C <sub>1</sub> Baltic.
<i>Peteinosphaeridium trifurcatum</i> Eisenack	B <sub>2</sub> –F <sub>1</sub> Baltic.
<i>f. breviradiata</i> Eisenack	
<i>B. hydroferum</i> Martin	Llanvirn–Llandeilo. Belgium.
<i>Veryhachium balticum</i> Eisenack	B <sub>2</sub> Baltic.
<i>V. trispinosum</i> Eisenack	Arenig–Silurian.
<i>V. lairdi</i> Deflandre	Arenig–Silurian.
<i>V. cf. sarthernardense</i> Martin	Llanvirn–Llandeilo. Belgium.
<i>Chitinozoa.</i>	<i>Ranges.</i>
<i>Conochitina primitiva</i> Eisenack	Upper Llanvirn–Caradocian.
<i>C. conulus</i> Eisenack	Llanvirn–Caradocian.
<i>Cyathochitina cf. campanulaeformis</i> Eisenack	Llanvirn–Llandeilo.
<i>Lagenochitina cf. bohémica</i> Eisenack	Llanvirn only.
<i>L. ovoidea</i> Benoit and Taugourdeau	Llanvirn–Llandeilo.
Graptolite siculae, biospheres, and scolecodonts are also present.	

It is hoped that further collecting and detailed investigation of the microfauna will give two results. Firstly, it may clarify the relative ages of the Milburn and Ellergill beds, and so solve the local problem of the structure in this part of the inlier. Secondly, it should enable the microfossil sequence to be correlated with the graptolite faunas of the *D. bifidus* zone of the standard British Ordovician sequence.

(Collection : A. J. WADGE ; Processing and separation : B. OWENS ; Identification : C. DOWNIE.)

#### REFERENCES

- DOWNIE, C., and T. D. FORD, 1966. Microfossils from the Manx Slate Series *Proc. Yorks. geol. Soc.*, **35**, 301–319.
- ELLES, G. L., 1898. The Graptolite Fauna of the Skiddaw Slates. *Q. Jl geol. Soc. Lond.*, **54**, 463–539.
- SHOTTON, F. W., 1935. The Stragrophy and Tectonics of the Cross Fell Inlier. *Q. Jl geol. Soc. Lond.*, **91**, 639–704.

INSTITUTE OF GEOLOGICAL SCIENCES,  
LEEDS.

A. J. WADGE and  
B. OWENS.

DEPARTMENT OF GEOLOGY,  
THE UNIVERSITY,  
SHEFFIELD.

C. DOWNIE.

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