

Section 3

The Oberbuchach 1 Section

(fig.9)

by Hans Peter Schönlaub

Section Oberbuchach 1 is exposed some 10 km east of Kötschach-Mauthen in a roadcut at an altitude of 1150 m. The small road runs from the Gail Valley near Gundersheim to Gundersheim Alm. Due to a new roadcut the lower portion of the sequence has been excellently exposed but was as yet not studied in detail. It comprises the whole Uggwa Limestone and the equivalents of the Plöcken Fm. described here as "basal quartzite".

At this locality the Silurian strata represent the mixed argillaceous-calcareous Nöbling Fm. The almost 50 m thick rocks of Llandovery to Ludlow age are underlain by the 16 m thick Uggwa Lst. succeeded by 10 m of the clastic Plöcken Fm. This horizon is overlain by interbedded laminated pyritic sandstones, black bedded cherty layers and black argillaceous shales containing a rich graptolite fauna of the zone of *M. gregarius*, subzone of *M. triangulatus* (see fig. 9).

This member is followed by a second horizon of graphitic sandstones. Its Llandoveryan age is inferred from the occurrence of diagnostic conodonts of the *P. celloni* Zone in limestones immediately above the upper sandstone member (sample no.89).

The limestones are overlain by an alternating sequence of dark argillaceous limestones, black argillaceous graptolite shales and lydites ranging through the Wenlock and the lower Ludlow. Near the base the *P. amorphognathoides*-conodont zone was recognized. The conodonts are associated with graptolites of uppermost Llandovery or early Wenlock age (zones 25 to 26 according to H. JAEGER). In the shales above graptolites occur at various levels starting off with the zone of *M. riccartonensis* and ending up with the zone of *M. nilssoni* or with a slightly younger age. Some 40 m above the base of the graptolite bearing sequence the Wenlock/Ludlow boundary may thus be placed.

In this part of the sequence other fossils than graptolites are very rare. The dark limestone beds intercalated in the black graptolite sequence are dominated by simple tooth-shaped conodonts like *Dapsilodus* and *Decoriconus*; yet only few ramiform conodonts have been found.

The corresponding rocks of the Ludlow and Pridoli Series consist of lithologically very characteristic and up to 20 m thick grey limestones showing a distinctly weathering surface which suggests solution processes. Comparable limestones are known from many areas in the Eastern and Southern Alps. Presumably, this horizon is coeval with the "Ockerkalk" of Thuringia and Sardinia.

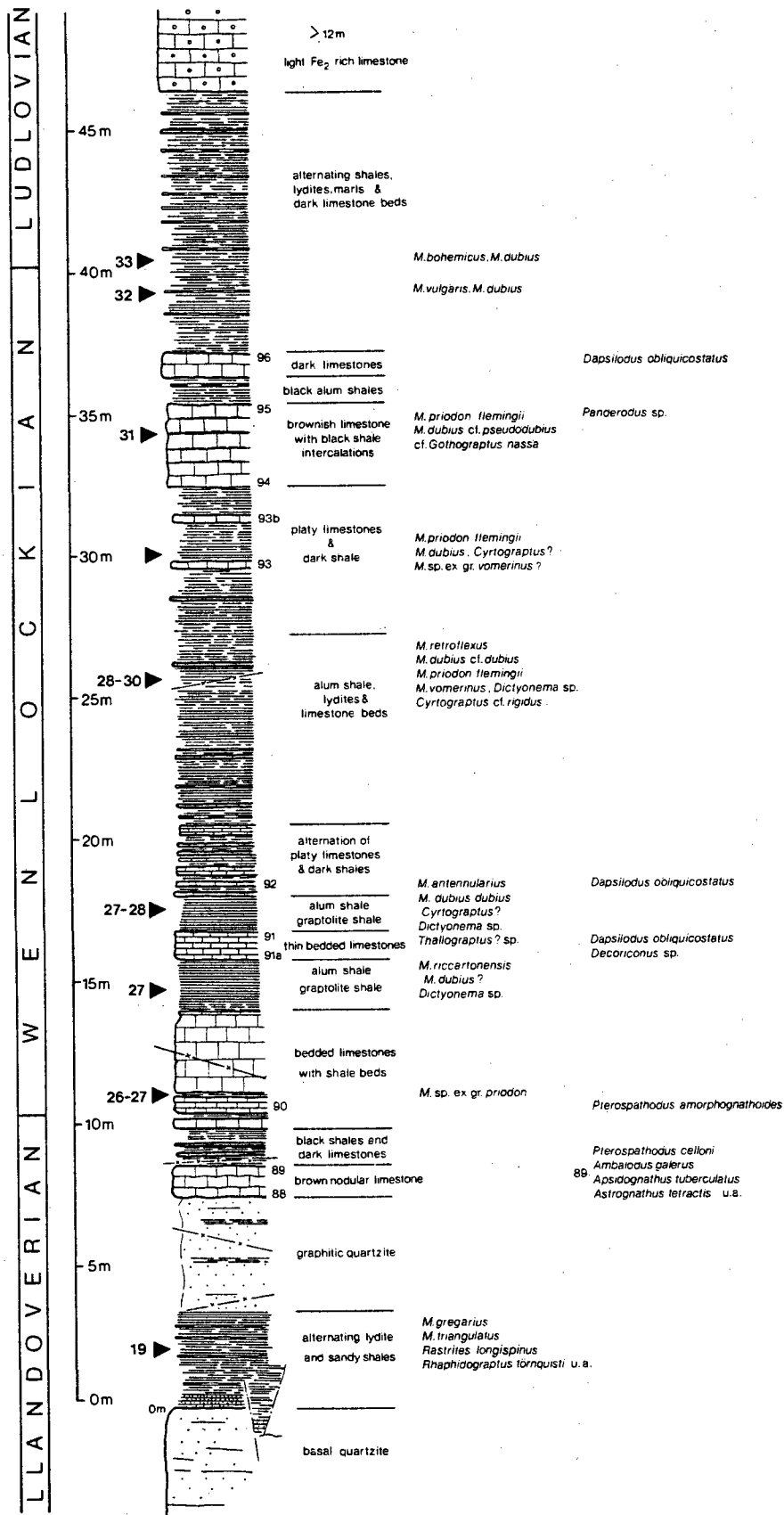


Fig. 9: The Silurian Section Oberbuchach 1. From JAEGER & SCHÖNLAUB (1980)

After the turn of the road the section continues into the Lockkov Series of the Lower Devonian. In this part only few conodonts have yet been found. Among others, the fauna includes *Ozarkodina r. remscheidensis* and *Pandorinellina optima*. They are associated with graptolites of the *M. praehercynicus* or *M. hercynicus* Zone but state of preservation does not permit a definite identification.