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Introduction

The Lofer cyclothems have been described by FISCHER (1964) from the Loferer Steinberge Mountains in Tyrol. They are characterized by sequences belonging to supra- to subtidal phases, called A-C by the author.

A generalized section of a Lofer cyclothem of bedded Dachstein Limestones given in fig.

Member A

Following a disconformity with erosional features indicating a subaerial exposure the Member A is characterized by a very thin unit (commonly a few cms to a few dms in thickness) containing intra-clasts of member B or C or both. This member is interpreted as palaeosoil formed in a supratidal environment.

Member B

This member, called loferites by FISCHER, is usually a few cms ranging up to 100 cm in thickness. FISCHER recognized 4 variations of loferites, named after the dominating elements: a) algal mat loferite, b) pellet loferite, c) homogeneous loferite, and d) conglomeratic loferite.

The algal mat loferite is characterized by algal stromatolites and laminated algal mats having a light colour in the field. Their depositional environment point to an intertidal milieu.

Member C

Reaching 1 to more than 10 m in thickness the member C is characterized by

dominance of megalodont pelecypods; it exhibits different facies types. The palaeontological and sedimentological features point to a subtidal environment of member C.

Algae:

The algae in member B are restricted to some cyanophyceans. The relatively rich flora of member C is represented by the dasycladacean green algae containing the genera *Heteroporella*, *Giro-porella* and a few specimens of *Diplopora*. Solenoporacean red algae (*Solenopora*) and some porostromate algae (*Cayeuxia* and *Ortonella*) are the most abundant nodular algae in member C and also in lagoonal facies of the bedded Dachstein Limestone.

Other organisms

The fossils of member B are restricted to partly abundant foraminifers (involutinids), a few gastropods and ostracods. Some trace fossils (fecal pellets of *Favreina* type) may also occur. In addition, to the mentioned fossils in member B additionally fossils (corals, some sponges, abundant megalodonts, other bivalves, and diverse foraminifers) are common in the member C.

Stop 6

Locality

Roadcuts along Loser Panoramastraße (N Altaussee)

Stratigraphy

bedded Dachstein Limestone, Norian. The Loser road passes through the bedded Dachstein Limestone exhibiting the lagoonal facies of Dachstein reef limestone in the lower part and some Lofer cyclothems with incomplete cycles exhibiting the intertidal-supratidal exposition of the younger part of the Dachstein Limestone on the upper part of the



B3

C
B
A

C

B

A

C

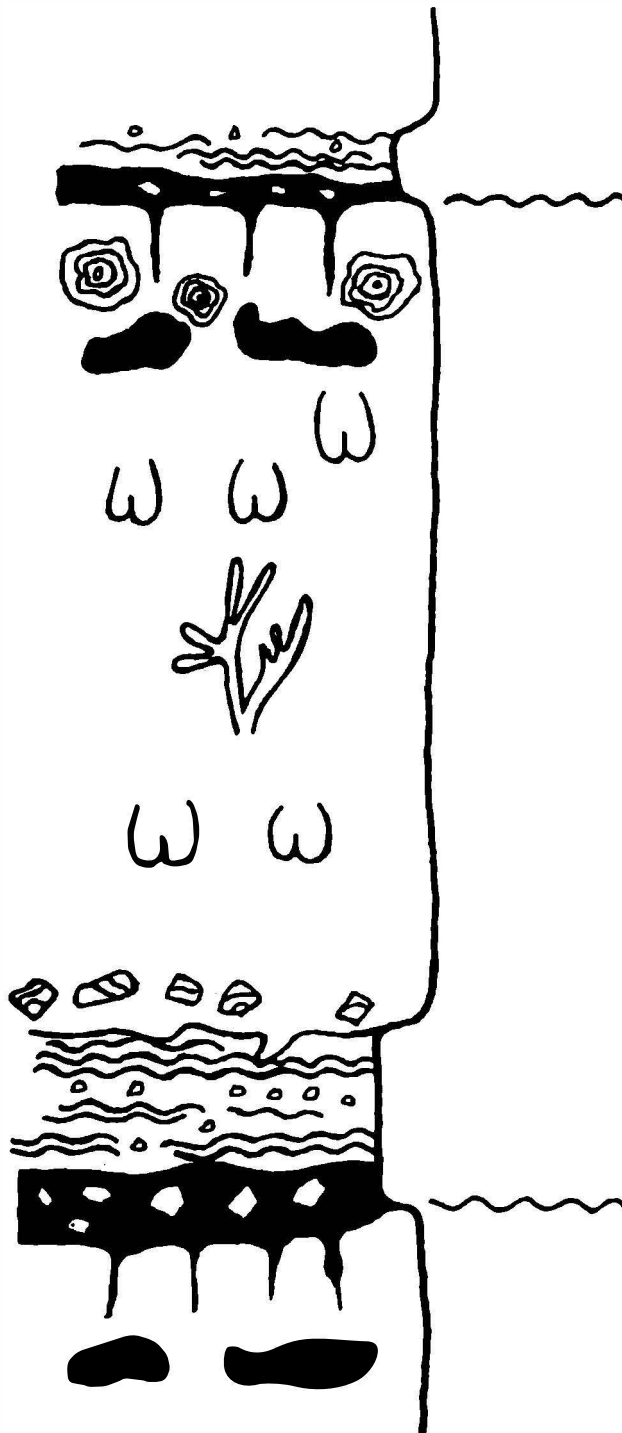


Fig. 1: Generalized section of the Lofar cyclothem of the bedded Dachstein Limestone (after FISCHER 1964).

B3



road. Some parallel (e. g. in Bräuning-salm, SE of the Loser summit) or diagonal (on several places along the Loser road) arranged fissures containing Liassic sediment fillings and cements occur within the Dachstein Limestones.

Algae

The most abundant algae within the bedded Dachstein Limestone are dasycladaceans, followed by nodular solenoporaceans (*Solenopora*, *Parachaetetes*,) and porostromate cyanophyceans (*Cayeuxia*, *Ortonella*). The dasycladaceans, occurring generally in grainstones, are represented mostly by the genus *Heteroporella* with several species. Diploporid and other dasycladaceans are not abundant. In addition to the mentioned groups of algae some stromatolites and algal mats may also occur.

Other organisms

Small biostromes containing relatively common corals, rare sponges, and other reef organisms occur within the bedded Dachstein Limestone. Other organisms are represented by bivalves (abundant megalodonts), gastropods, echinoderms and rare ammonites. The microfauna is represented by a characteristic foraminiferal association containing large involutinid and aulotortid taxa.



Stops 3 - 6

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