

# Cellon Formation

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Österreichische Karte 1:50.000  
Blatt BMN 197 Kötschach

Blatt UTM 3109 Oberdrauburg  
Blatt UTM 3110 Kötschach-Mauthen  
Blatt UTM 3116 Sonnenalpe Naßfeld

Carta Topografica d'Italia 1:50.000  
Foglio 018 Passo di Monte Croce Carnico  
Foglio 031 Ampezzo  
Foglio 032 Tolmezzo

## Definition

Stromatoporoid and coral-bearing very thick bedded floatstone/rudstone (BANDEL, 1972, 1974; KREUTZER & SCHÖNLAUB, 1984; SCHÖNLAUB, 1985; KREUTZER, 1990, 1992a, b; HUBMANN et al., 2003; SCHÖNLAUB et al., 2004; SCHNELLBÄCHER, 2010).

## Description

Medium dark gray, very thick bedded (more than 10 m), poorly sorted, coral- and stromatoporoid-bearing rudstone and subordinate floatstone with clasts up to ca. 40 cm of diameter and poorly sorted, very coarse to fine grainstone matrix; sometimes rudstone shows a fining upward trend up to grainstone. Sometimes the layer base shows inverse grading with laminated grainstone passing to floatstone/rudstone. However, the deposits are mostly disorganised.

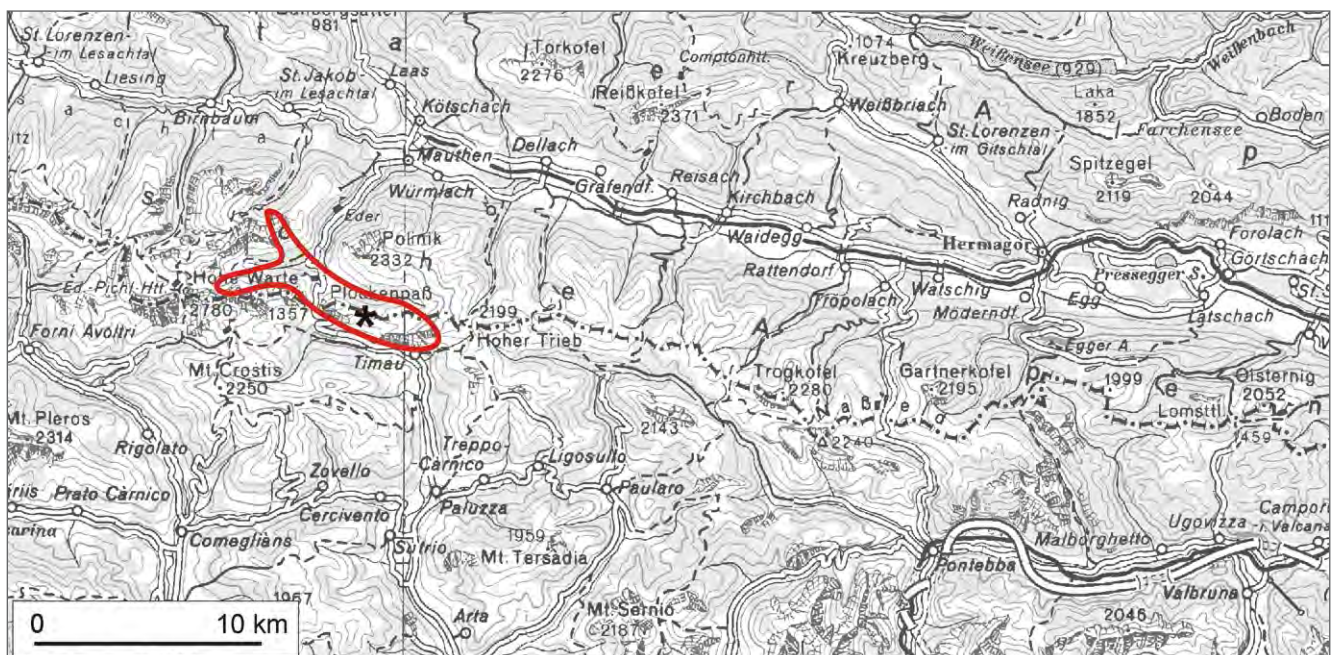
A phosphorite-rich horizon (BANDEL, 1972) is present about 9 meters from the top of the unit.

## Fossil content

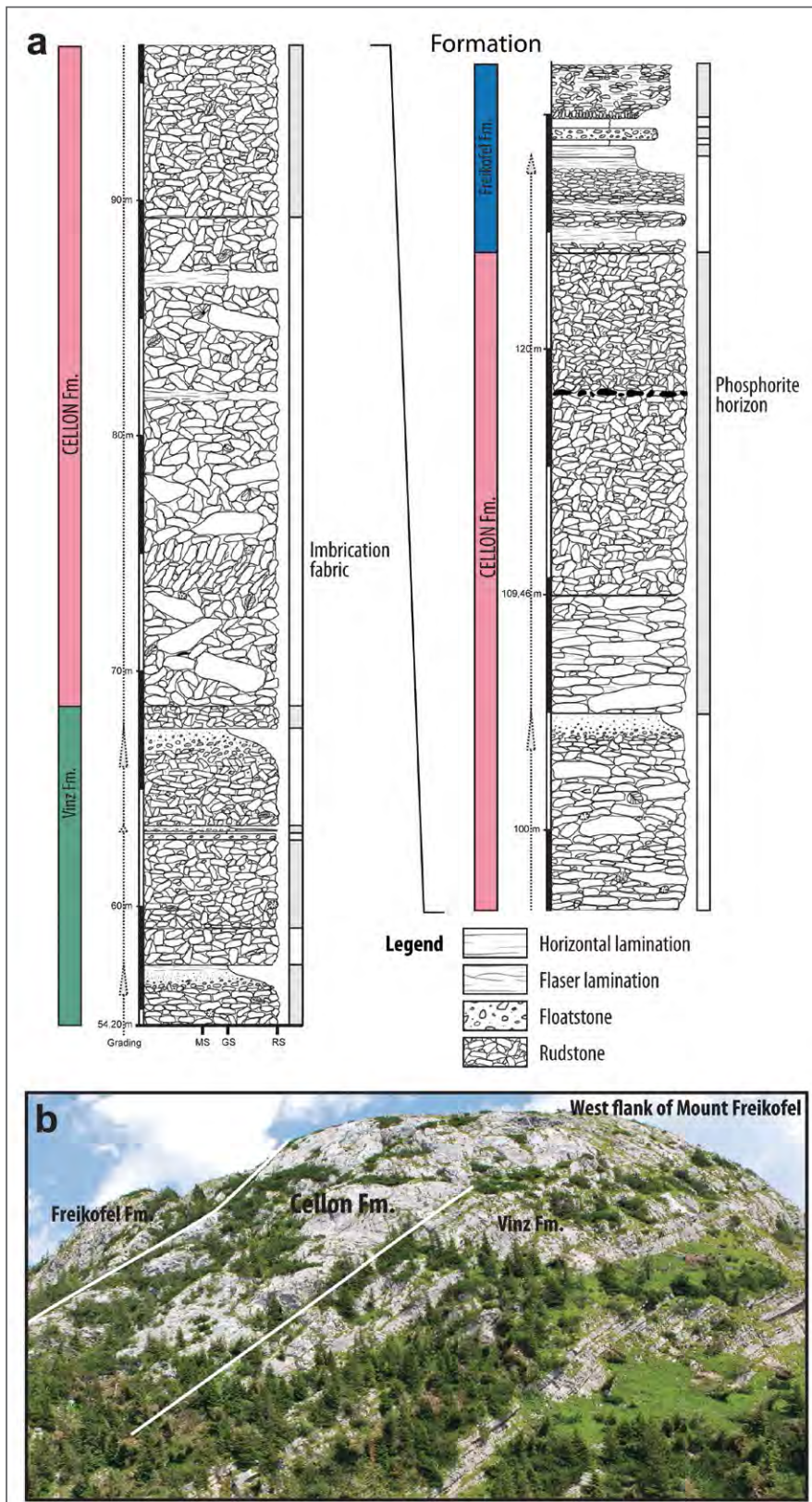
Bivalves, cephalopods, conodonts, corals, echinoderms, parathuramminaceae, stromatoporoids, trilobites.

## Depositional environment

The Cellon Formation was formed at the slope of a carbonate apron (SCHNELLBÄCHER, 2010) and consists of gravity-driven resedimented deposits in forereef facies.



Areas of outcrop of the Cellon Formation with indication of the stratotype (asterisk).



The Freikofel section. a) log of the Cellon Formation (SCHNELLBÄCHER, 2010); b) view of the section taken from the west (photo M. PONDRELLI).

## Stratotype

Freikofel Section, located on the western slope of Mt. Freikofel (BANDEL, 1972; SCHNELLBÄCHER, 2010), between coordinates N 46°36'01.5" E 12°58'33.0" (base of the section) and N 46°36'05.1" E 12°58'33.9" (top of the section).

## Reference sections -

## Type area

Central Carnic Alps.

## Main outcrop areas

The Cellon Formation crops out in the Rauchkofel area, in the south side of the Valentintal and between the Cellon/Creta di Collinetta and the Creta di Timau.

## Thickness

About 55 m (Freikofel) to about 85 m (Kellerwand).



Views of the Cellon Formation in the field (photos M. PONDRELLI). a) part of a rudstone bed: Freikofel Section; b) part of a rudstone bed: Freikofel Section; c) erosional surface within a bed: Freikofel Section; d) phosphorite nodules: Freikofel Section.

## Boundaries

*Underlying units* – Vinz Formation (conformable sharp contact).

*Overlying units* – Freikofel Formation (conformable sharp contact).

*Lateral units* – Spinotti Formation p.p., Kellergrat Formation (proximal part); Hoher Trieb Formation p.p. (distal part).

## Derivation of name

After Mount Cellon.

## Synonymy

'Lithoklastkalk' [partim]: BANDEL (1974).

Cellon Kalk [partim]: KREUTZER (1990).

Cellon limestone [partim]: KREUTZER (1992b).

Calcareni di transizione prossimali [partim]: VENTURINI (2006).

Freikofel Rudstone [partim]: BRIME et al. (2008).

Calciruditi del Freikofel [partim]: SPALLETTA & PONDRELLI (2009).

## Chronostratigraphic age

Devonian: Givetian (KREUTZER, 1990, 1992a, b; SCHNELLBÄCHER, 2010).

## Biostratigraphy

*Conodonts*. – The base of Cellon Formation has been assigned to the *hemiansatus* Zone (Freikofel section).

## Complementary references -

## Remarks -

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Artikel/Article: [Cellon Formation 117-120](#)