

National Commission for Stratigraphy Belgium

Home Lower Paleozoic Devonian Carboniferous Permian/Triassic/Jurassic Cretaceous Paleogene-Neogene Quaternary
News RegWal Alteration units

5.39 Lives Formation - LIV

Carboniferous

[Commission members](#)
[Proposals and discussions](#)
[Lithostratigraphy](#)
[Chronostratigraphy](#)

Authors: Demanet, 1923; Michot et al., 1963; Paproth et al., 1983.

Description: Well-bedded, pale grey to dark limestones, arranged in parasequences. 3 members can be recognized.

- **Haut-le-Wastia Member – HLW** (Laloux et al., 1996a, 1996b)

Thick-bedded, pale grey to grey limestones in parasequences in which stromatolites and lime mudstones are dominant. There are some beds of breccia and oolitic limestone but bioclastic limestone is uncommon. The member is brecciated in places due to dissolution of evaporitic layers ("Petite Brèche Viséenne"). It corresponds to "V2ba" of Conil et al. (1967). The Haut-le-Wastia Mbr is separated from the underlying Neffe Fm by a bentonite, locally transformed into a palaeosol ("Banc d'or de Bachant").

- **Corphalie Member – CIE** (Laloux et al., 1996a, 1996b)

The lower part is composed of thick-bedded, dark, bioclastic limestones with brachiopods and corals (mainly *Siphonodendron*, heterocorals and *Lithostrotion araneum* at the base), whereas the upper part comprises thin-bedded, dark, lime mudstones, with an argillaceous bed (weathered ash). The member forms a single, thick parasequence (sequence 0 or "V2bb" of Conil et al., 1967).

- **Awirs Member – AWI** (Laloux et al., 1996a, 1996b)

The member includes 3 units : 1) a lower one, composed of 6 parasequences mainly of dark grey, bioclastic limestone, sometimes cherty, rich in colonial corals (*Siphonodendron martini*), followed by a micritic or stromatolitic top ("V2bg"); 2) a middle unit of dark, bioclastic limestone rich in chert ("V2bd"); and 3) an upper unit composed of 4 parasequences mainly of pale to dark grey, bioclastic limestones ("V2be").

Stratotype: Quarry and cliff situated on the south side of the Meuse valley, downstream from the Beez motorway bridge, at Lives (NSA). Haut-le-Wastia Mbr: Haut-le-Wastia quarry, on the north side of the Molinee valley (DSA). Corphalie Mbr: old quarry at the top of the north slope of the Meuse valley at Corphalie (NSA). Awirs Mbr: eastern Awirs quarry, below Aigremont castle, north of the Meuse valley between Engis and Flemalle (NSA).

Area: The Lives Fm is known everywhere in the Namur-Dinant Basin, and extends to the Boulonnais (Haut-le-Wastia Mbr = upper part of the Haut-Banc Limestone; Corphalie Mbr = top of the Haut-Banc Limestone and base of the *Siphonodendron martini* Dolomite; Awirs Mbr = *Siphonodendron martini* Dolomite). The formation corresponds to the Blaton Limestone of Dupont, 1875, in the western part of the HSA.

Thickness: About 83 m at Lives (HLW = 30 m; CIE = 18 m; AWI = 35 m). In their stratotypes, the Haut-le-Wastia Mbr is about 30 m thick, the Corphalie Mbr 16 m thick and the Awirs Mbr 35 m thick.

Age: Early Livian. Cf5 Foraminifera Zone, RC5gCoral Subzone (Haut-le-Wastia Mbr) and RC6 Coral Zone (Corphalie and Awirs Mbrs) (Conil et al., 1991). The Lives Fm corresponds to the TST of the third-order sequence 7 of Hance et al. (2001).