

# Rivière Formation - RIV

**Authors:** de Dorlodot, 1895; Bultynck, 1991d.

**Description:** The Rivière Fm is subdivided into two members, in ascending order the Rouillon and Claminforge Members. The Rouillon Mbr chiefly consists of sandy red and greenish shales and some sandstone beds. Bioclastic limestone lenses and coquinoid brachiopod layers occur in the lower part, overlying in the stratotype section a conglomeratic bed (= Tailfer Conglomerate of Stainier, 1891). The Rouillon Mbr succeeds the last thick conglomerate bed of the Burnot Fm. The Claminforge Mbr is composed essentially of light-greyish calcareous very fine sandstones and calcareous shales with intercalations of reddish and greenish shales and occasionally calcareous nodular and rare limestone beds. Some of the calcareous sandstones are laminated.

**Composite stratotype:** The stratotype for the lower boundary is exposed along the west side of the N96 Namur-Dinant between km14 and km15 at Rivière. The boundary between the Rivière Fm and the overlying Névremont Fm is exposed at Godinne (Tantachau) along the south side of the road Rivière-Mont, about 600m east of the bridge over the railway Namur-Dinant.

**Area:** Northern flank of the Dinant Synclinorium and southern flank of the Namur Syncline.

**Thickness:** In the central part of the northern flank of the Dinant Synclinorium the thickness of the Rivière Fm varies between 50 and about 80m, in the western part it is about 50m thick. In the Aisemont section situated in the central part of the southern flank of the Namur Syncline the formation is about 75m thick.

**Age:** Eifelian-? early Givetian. In the type area of the formation the lower part of the Rouillon Mbr belongs to the boundary interval between the *partitus* and *costatus* conodont Zones and the top of the Claminforge Mbr probably belongs to boundary interval between the *ensensis* and the *timorensis* (= lower part of Lower *varcus* Zone) Zones. There may be a stratigraphic gap between the Rivière and Névremont Formations (Bultynck & Boonen, 1976; Bultynck et al., 2000).

**Remarks:** The Rouillon Mbr approximately corresponds to the "Grauwacke rouge de Rouillon" of Gosselet (1873) and the Claminforge Mbr to the "Macigno de Claminforge" of de Dorlodot (1895). In the stratotype section of the Névremont Fm at Aisemont the base of this formation is lowered herein in comparison to its position indicated in Bultynck et al. (1991, p.71). The boundary between the Rivière and the Névremont Formations should be at the top of the argillaceous limestone bed 11.30m above the base of the column. The arguments for this change are expressed in Coen-Aubert (2000, pp.10-11).