

Summarised description

Unit name

Barrage Member

Code

BAG

Status

Formal Member

Parent unit

Hierges Formation

Child units

none

Characteristic description

Fossiliferous calcareous sandstone, siltstone and shale and non-carbonate sandstone.

Age

Late Emsian

Thickness

300 to 310 metres

Area of occurrence

Southern margin of the Dinant Synclinorium.

Type locality

Section along the Eau Noire south of Couvin.

Alternative names

Grauwacke d'Hierges

Authors

Godefroid & Stainier (1994).

Modified after

Denayer, J. & Mottequin, B., 2024. Lower Devonian lithostratigraphy of Belgium. *Geologica Belgica*, 27/3-4, 115–154.

Date

23/09/2025

Cite as

Denayer, J. & Mottequin, B., 2025. The Barrage Member, 23/09/2025. National Commission for Stratigraphy Belgium. <https://ncs.naturalsciences.be/lithostratigraphy/Barrage-Member>

Full description

Unit name

Barrage Member

Code

BAG

Status

Formal Member

Parent unit

Hierges Formation

Child units

None

Origin of the name

After the *barrage* (dam) along the Eau Noire river south of Couvin.

Alternative names

Grauwacke d'Hierges

Authors

Godefroid & Stainier (1994b, p. 80) : *Membre du Barrage*

Modified after

Denayer, J. & Mottequin, B., 2024. Lower Devonian lithostratigraphy of Belgium. *Geologica Belgica*, 27/3-4, 115–154.

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Characteristic description

The Barrage Member consists of shale and siltstone, locally carbonated, in which many beds of fossiliferous calcareous sandstone and non-carbonate sandstone with or without fossils are incorporated. The fossils are usually dissolved on the outcrops and preserved as steinkerns (*Grauwacke de/d'Hierges* in the literature).

Area of occurrence

South and south-eastern flank of the Dinant Synclinorium. The Hierges Formation *stricto sensu* is recognised until the meridian of Chanly (Dumoulin & Blockmans, 2013). Eastwards, this unit becomes sandier and, at Tellin, a gravely sandstone level is present at its top (Blockmans et al., 2019). This transitional facies of the Hierges Formation was named *facies mixte* or *facies de Jemelle* by Asselberghs (1946).

Type locality

No section presents the entire unit in the eponymous locality. The stratotype for the lower limit, with the underlying Chooz Formation, is along the Vireux–Mazée road, west of the crossroads with the Givet road whereas that for the upper limit, established by Godefroid & Stainier (1994) at Saint-Joseph near Nismes, has entirely disappeared nowadays. A new stratotype for this limit is proposed along the Eau Noire south of Couvin (also stratotype of the Moulin de la Foulerie Formation, see Denayer et al., 2024).

Age

The lower part of the Barrage Member spans the interval of the *laticostatus* to the *serotinus* zones (Bultynck, 1970; Bultynck & Godefroid, 1974; Godefroid & Stainier, 1994). Among the very rich brachiopod fauna of the Hierges Formation (e.g. Godefroid, 1994), spiriferides are important for correlation with the nearby Rhenish Massif.

Thickness

The member is 300–310 m thick in the Eau Noire River valley (Godefroid & Stainier, 1994).

Lower boundary

The first thick bed of calcareous fossiliferous sandstone and shale.

Upper boundary

The top of the member, corresponding also to the top of the Hierges Formation is defined below the first massive shelly limestone bed of the overlying Saint-Joseph Member of the Moulin de la Foulerie Formation.

Regional correlations

East of the Lesse River valley, the distinction between the two members is difficult.

References

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