Carboniferous

Commission members
Proposals and discussions
Lithostratigraphy
Chronostratigraphy

5.41 Hoyoux Group - HOY

Authors: Delcambre & Pingot, 2000.

Description: The Bonne River Fm and the Anhée Fm compose the Hoyoux Group (consult their descriptions).

Stratotype: Hoyoux valley between Royseux and Chabôfosse.

Thickness: About 115 m in the Hoyoux valley.

Area: DSA, CSA, western part of the NSA.

Age: Warnantian. Cf6 Foraminifer Zone, RC7 and RC8 Coral Zones.

5.41.1. Bonne River Formation – BON

Author: Poty, this paper.

Description: This formation includes the Thon-Samson Fm, the Poilvache Fm and part of the Anhée Fm of Paproth et al. (1983).

- ***Thon-Samson Mbr - THO*** (Conil et al., 1967; Pirlet, 1968a; Paproth et al., 1983)

This member includes the Thon-Samson Fm of Paproth et al. (1983), except for the bedded lime mudstones, stromatolitic and other limestones (packstones-grainstones) at the top of that formation which resemble those of the overlying Poilvache unit and are now included in it. The Thon-Samson Mbr is, therefore, mainly composed of massive, pale to dark limestones (grainstones-rudstones), usually crinoidal (“petit-granit” de Thon). Corals and brachiopods are locally present.

- ***Poilvache Mbr - POI*** (Conil et al., 1967; Pirlet, 1968a; Paproth et al., 1983; Poty et al., 1988)

As defined here, the Poilvache Mbr includes (1) some limestones previously attributed to the Thon-Samson Fm by Paproth et al. (see above), (2) the Poilvache Fm of Paproth et al., and (3) part of the overlying Anhée Formation of Paproth et al. It comprises bedded, pale to dark limestones, sometimes cherty, arranged in parasequences dominated by lime mudstones and stromatolitic limestones. Macrofossils (corals and brachiopods) are uncommon.The formation is locally brecciated (“Grande Brèche Viséenne”).

Stratotype: The Bonne River Fm is exposed near and along the old railway in the village of Modave (Pirlet, 1968), on the east bank of the R. Bonne. Thon-Samson Mbr, Plates-Escailles quarry at Maizeret, on the west side of the Samson valley. Poilvache Mbr, north-eastern part of the Poilvache Castle Rock, on the east side of the Meuse valley, 6 km north of Dinant.

Thickness: Thon-Samson Mbr: 8 m in the stratotype. Poilvache Mbr: 80 m.

Area: NSA, CSA, DSA. The Thon-Samson and Poilvache Mbrs are known in the Boulonnais where they correspond respectively to the lower and the upper parts of the Joinville Limestone (Poty, 1994).

Age: Early Warnantian. Thon-Samson Mbr: Cf6aForaminifer Subzone, top of the RC6 Coral Zone or base of the RC7 Coral Zone (possible appearance of *Dibunophyllum*) (Conil et al., 1991). Poilvache Mbr: top of the Cf6ato lower part of the Cf6gForaminifer Subzones, RC7aCoral Subzone (presence of *Dibunophyllum* and *Diphyphyllum*) (Conil et al., 1991). The Thon-Samson Mbr corresponds to the HST of the third-order sequence 8 of Hance et al. (2001), while the Poilvache Mbr corresponds to the TST of the third-order sequence 9.

5.41.2. Anhée Formation – ANH

Authors: de Dorlodot, 1909; Pirlet, 1968a; Paproth et al., 1983; Poty et al., 1988.

Description: The Anhée Fm, as defined here, does not correspond to the definition of Paproth et al. (1983) in that: (1) it

excludes parasequences with dominant lime mudstones and stromatolitic boundstones which are now attributed to the underlying Poilvache Mbr of the Bonne River Fm, and (2) it includes the overlying Warnant Fm of Paproth et al. (1983).

The formation therefore includes two members:

- The ***Lower Member*** **– *AMI*** Mbr nov. (Poty) comprises parasequences of dark limestones dominated by wackestones and packstones, with gigantoproductids and some corals. Locally (Hoyoux valley, Chabôfosse Facies - CHB, Poty), the parasequences include very fossiliferous, coarse-grained packstones and grainstones with coral biostromes (Pirlet, 1964; Poty et al., 1988). This unit includes limestones previously attributed to the lower part (Lower Mbr, “lower V3c”) of the Warnant Fm of Paproth et al. (1983).

- The ***Upper Member*** **– *AMS*** Mbr nov. (Poty) comprises argillaceous limestones, shales and siliceous shales, with phosphatic nodules, previously attributed to the upper part (Upper Mbr, “upper V3c”) of the Warnant Fm of Paproth et al. (1983).

The formation is locally brecciated (“Grande Brèche Viséenne”).

Stratotype: Old underground quarry Watrisse at Anhée, on the western bank of the Meuse valley, about 6 km north of Dinant (DSA). Chabôfosse Facies: road and hill sections at Chabôfosse (Royseux) in the Hoyoux valley, 2 km north of Pont-de-Bonne.

Thickness: Lower Mbr, 25 m; Upper Mbr, from zero to 8 m.

Area: DSA, CSA, western part of the NSA. The Upper Mbr is locally absent (i.e. Hoyoux valley)

Age: Mid and late Warnantian. Upper part of the Cf6gand Cf6dForaminifer Subzones (Conil et al., 1991); RC7bCoral Subzone and base of the RC8 Zone (appearance of *Lonsdaleia*) (Poty et al., 1988). The Lower Mbr of the Anhée Fm corresponds to the HST of third-order sequence 9 (Hance et al., 2001), whereas the Upper Mbr (previously the upper member of the Warnant Fm) possibly corresponds to the TST of a following third-order sequence.