

Edouard Poty: a bio- and bibliography

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‘Generalist’ is a qualifying word that best describes Edouard – ‘Eddy’ – Poty in term of knowledge. He is not just a well-known palaeontologist. Passionate in all branches of geology, he developed an exceptional background and became one of the very few feeling comfortable out of his area of expertise and capable of seeing the bridges connecting field observations. His research and publications do not necessarily reflect his wide knowledge but those who have or have had the chance to work with him know that Eddy is a living encyclopedia. Moreover, his interest largely crosses over the borders of geology and he can with erudition discuss archaeology, history, architecture, volcanoes, anthropology, literature, cuisine and wine! To understand the man, let us visit his career.

Born in 1949 in Seraing, near Liège in Belgium, the young Eddy quickly found his interest in fossils after he discovered brachiopods in the excavation made for the construction of a bridge in Esneux. His first fossils... and the beginning of a life-long passion for geology. During his childhood and teenage years, he used to search for fossils and minerals while on holiday with his parents, but also around Liège.

In 1967, he entered the University of Liège to study geology (at that time ‘Geological and Mineralogical Sciences’) and learned from Prof. Bellière, Michot and Ubags among others. Four years later he presented his master’s thesis on Viséan corals. His scientific career was not yet cast because military service

was compulsory... but Eddy was not made for the uniform and the discipline which go along with the military. We find him back enrolled in civilian service as a mathematics teacher in Algeria. He spent a year teaching during the week and travelling through the desert during week-ends and holidays to explore the mountains and to collect fossils! Enchanted by Algeria, Eddy would reiterate the experience in the Congo and settled for two more years in Bounia. His life there, if his uncountable anecdotes are true, was epic and amazing.

Back in Belgium in 1974, Eddy joined the University of Liège, where for two years he taught the practical classes in geology at the geography department for Prof. Macar. In 1976 he returned to the geology department with an IRSIA research grant to start a PhD under the direction of Prof. Ubags. He focused on a group untouched since the 1920’s: the Lower Carboniferous rugose corals. Thus started his long-lasting and very friendly collaboration with Raphaël – ‘Raph’ – Conil and his team at the University of Louvain-la-Neuve. After his PhD in 1980 (for which he was laureate of the Belgian Royal Academy) he kept his deep interest in research for corals, first as an assistant and later assistant lecturer. In 1987 Eddy succeeded Prof. Ubags as Professor of Palaeontology at the University of Liège. This was a new start again, making possible new collaborations to revisit the Carboniferous of Belgium and surrounding areas. No need to look to his mountain boots to understand that Eddy is a good



Figure 1. World Map of Edouard Poty's publications and collections. Cyphers indicate the number of publications for each country. Black stars stand for Palaeozoic corals from Eddy's collection. White stars stand for other corals from his collection.

field geologist who enjoys describing, measuring and sampling sections. Very few outcrops escaped to his hammer in Belgium and abroad. Step by step and country after country, he gathered what was going to be one of the largest – if not *the* largest – collection of Carboniferous corals worldwide with more than 20 heavy cubic-metres of hand-specimens and 30,000 thin sections (and an unknown number of unclassified ones) from more than 60 regions (Fig. 1), each sample localized and stratigraphically positioned. Hundreds of those samples are rare specimens or specimens from localities that are no longer accessible and thus making this collection even more valuable. Thanks to many worldwide collaborations – several being running for more than 40 years on – Eddy gathered an incredible knowledge on the Carboniferous of the world. In 2015, his research on corals was rewarded by the highest prize in this field: the Henry Milne Edwards Medals from the Association for the Study of Fossil Cnidaria and Porifera.

Scientific research was very important for Eddy. However, he never stopped teaching geology, palaeontology and evolution to hundreds of passionate and less passionate students in various degree programs and arousing the interest of geologists-to-be. Humble and accessible, he was never too busy with his projects to open his door to undergraduate, graduate and PhD students. In 40 years, he directed more than 50 master's and 8 PhD theses covering an incredibly wide area of topics, from Carboniferous rugose corals to Quaternary cave sedimentology and from Devonian fishes to Cretaceous ichthyosaurs. Science will remember the outcomes Eddy made on the understanding of fossil corals, litho- and biostratigraphy, sequence stratigraphy and pioneer works on event-stratigraphy across the Frasnian-Famennian boundary, Devonian-Carboniferous boundary and through the Early Carboniferous. What many students will remember are his ability to decode structures in the field and give extremely valuable insights on any palaeontological issue... as well as his impressive climbing and story-telling capabilities.

In addition to his academic and scientific career, Eddy conducted a vast body of expert work for industry, mainly for quarrying companies and lime producers. His expertise on pure carbonate led him all around the globe where he conducted field studies in any field and throughout the geological time scale from the Precambrian to the Pleistocene. Between 1995 and 2001, his collaborators and himself were chosen by the regional government to establish an updated database of industrial rock production and to safeguard resources in southern Belgium. This resulted in a thousand-page report summarized in a book (Poty & Chevalier, 2004) which is still the standard reference for the extractive industries of Belgium. An update of the database (more than 1500

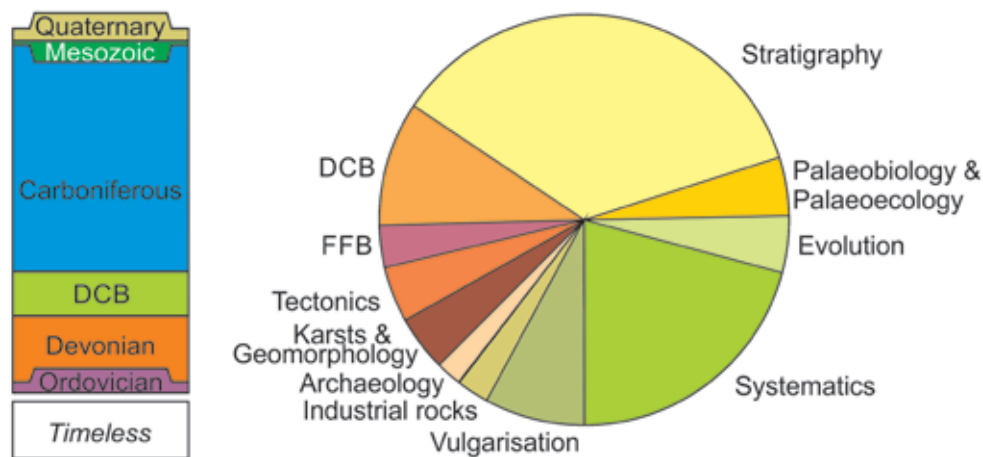
sites) was conducted by him and his team and was followed by a socio-economic analysis of the quarrying industry. In parallel, Eddy led the revision of the geological maps of southern Belgium between 1991 and 2014, a program that still goes on today through his collaborators at the University of Liège. Eddy also performed so many expert assessments at all scales and for so many purposes (quarries, oil geology, land stability, archaeology, geo-tourism, etc.) that it is virtually impossible to list them here.

Eddy has been a member of the Société géologique de Belgique and Geologica Belgica since 1968 and was assistant secretary of this society from 1983 to 1994. He belongs to several scientific societies, including the International Association for the Study of Fossil Cnidaria and Porifera from 1975 and was chairman organizer for the XIth symposium of the association in 2011 in Liège (Aretz et al., 2011; Aretz & Poty, 2011; Denayer et al., 2012). He has been active in the International Commission of Carboniferous Stratigraphy since the early 1980's and serves as a voting member of this commission since 2007. He took part in the creation of several local scientific groups of various purposes. Relentless field worker, Eddy led uncountable field trips in Belgium for Belgian and international scientific societies. Nobody who attended one of those can forget the lunch breaks... No doubt that he will continue to organize field meetings in the forthcoming years for the benefit of everyone.

He participated actively to the life of the Palaeontological Group and Geology Department of the University of Liège and was president of the latter from 1992 to 1995 and from 2001 to 2005. Between 1999 and 2008 he was head of the working group of the Geological Map of Wallonia for which he employed 10 field geologists from five Belgian universities and research institutes. At the same period, he was head and coordinator of the Walloon Ground Water Observatory. His public life also includes a seat at the selection committee of the Royal Belgian Institute of Natural Sciences, at the Clément Guion medal selection board, at the scientific committee of the Geological Map of Wallonia and to the Belgian national stratigraphic committee (he was head of the Carboniferous sub-commission). He acted – and still acts – as a reference person for geological issue for many and various communities and administrations. Eddy was also a pioneer of the development of geo-sites in Belgium and contributed to their preservation (e.g. Mottequin et al., 2012).

Because of his vast knowledge of geology and palaeontology in any context, age or phylum, Eddy was, is and will remain a mentor for his collaborators and, hopefully, will continue to inspire future generations of scientists.

Figure 2. Stratigraphical and topical publications of Edouard Poty between 1975 and 2015. DCB: Devonian-Carboniferous boundary, FFB: Frasnian-Famennian boundary.



Comments and selected bibliography (Fig. 2)

It is not the aim to present and discuss Eddy's entire publication list of more than 100 papers and more than 200 conference abstracts and field guide books. But it is worthwhile commenting on some of them. His earliest publications deal with the systematics of Viséan rugose corals from Belgium (Poty, 1975a, b, c). They initiated the work for his PhD thesis that was subsequently published (Poty, 1981) and which is still a highly cited reference. Three major references need to be cited for his work on evolution of Palaeozoic corals: Poty (1993) for the recognition of heterochrony in the evolution of lithostrotionids; Poty (2007) for the palaeogeographic influence on the evolution of fossil assemblages; and Poty (2010) for an overview of the intrinsic processes involved in the evolution of corals.

Going back to his time in the geography department, Eddy developed a peculiar interest on palaeokarst associated to block faulting systems of the Visé area (Poty, 1980, 1982). In the early 1980's, Eddy was involved in a highly successful exchange program between Belgium and the Soviet Union, which allowed him the collection and study of the Siberian Far-East (Omolon area) (Conil et al., 1982; Poty & Onoprienko *in* Shilo, 1984). The stratigraphic comparison of the coral fauna from Belgium with those of the British Isles (Poty, 1983, 1989), N France (Poty & Hannay, 1994) and Canada (Poty, 2002) came later. The Belgian-Chinese collaboration of the 1990's led him to focus on coral fauna from SE China both from the stratigraphic and systematic point of view (Poty & Xu, 1996, 1997; Xu & Poty, 1997). His interest in Carboniferous stratigraphy was not new at this point as older publications prove (Paproth et al., 1983; Poty, 1984a, 1985; Conil et al., 1991; Poty et al., 2001, 2014), but from the late 1990's on Eddy focused mainly on sequence stratigraphy (Hance et al., 2001, 2002) and biostratigraphy that culminated in a key reference: Poty et al. (2006). Published in the Geological Magazine, it summarizes the power of biostratigraphy coupled to sequence stratigraphy. Naturally, his research on stratigraphy and corals lead him to the Latest Devonian and to the Devonian-Carboniferous boundary and bioevents. Several papers (Poty, 1984b, 1986; Poty & Boland, 1994; Poty & Xu, 1996; Poty, 1999) deal with the extinctions and recoveries of corals across the Devonian-Carboniferous boundary. Eddy and collaborators also got interested in the Late Frasnian Crisis and palaeoenvironmental changes across the Frasnian-Famennian boundary (Poty & Chevalier, 2007; Denayer & Poty, 2010; Mottequin & Poty, 2016).

Most of his work on Carboniferous corals from the Montagne Noire (Poty et al., 2002), the British Isles (Hance et al., 2002), Poland (Poty et al., 2003), and South China (Poty et al., 2011) remains unpublished to date, as do the Tournaisian corals from Tournai and the Strunian corals of Western Europe, and most of his students' master's theses. Let us hope that he will find time to finally put this 'grey literature' to light soon.

Out of his 105 publications 33 have been published in the *Annales de la Société géologique de Belgique* and *Geologica Belgica*, thus 1/3 of his work. This and the several volumes he edited in these journals fully justify this homage volume to be published in this journal.

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