below or adjacent (“Prebasaltic Gravel, Silberberg Gravel”) as well as on top (“Postbasaltic Gravel”) of variegated alkali basaltic volcanics of Plio-/Pleistocene age.
Except the works of WINKLER-HERMADEN (e.g., 1957), especially the paper of KOLLMANN (1965), the studies of KRÖLL et al. (1988), EBNER & SACHSENHOFER (1991, 1995) and SACHSENHOFER et al. (1997) offer detailed data about the basement and basin filling. GROSS et al. (2007a) provide a more recent compilation; SCHREILECHNER & SACHSENHOFER (2007) present a sequence stratigraphic framework.

3. The Field Trip

3.1. Stop 1 – Plabutsch–Fürstenstand

Topic: Introduction to the geology of the vicinity of Graz.
Locality: Fürstenstand, 4.5 km WNW Hauptplatz Graz, 47°05’25”N/15°23’6”E.
Description: After the incorporation of some municipalities in the year 1938 the hill Plabutsch with 754 m altitude became the highest elevation of the city Graz. The derivation of the name “Plabutsch” is not clarified. Possibly Celtic roots of „pla” indicate the meaning of iron smelt.
At the summit of the Plabutsch a little observation tower called “Fürstenstand” is located more than 400 metres higher than the centre of Graz and therefore provides a magnificent view over Graz and a panoramic view over the hilly landscape of the surrounding countryside, fair weather provided. The most important geologic units recognisable from here are illustrated in Fig. 7.

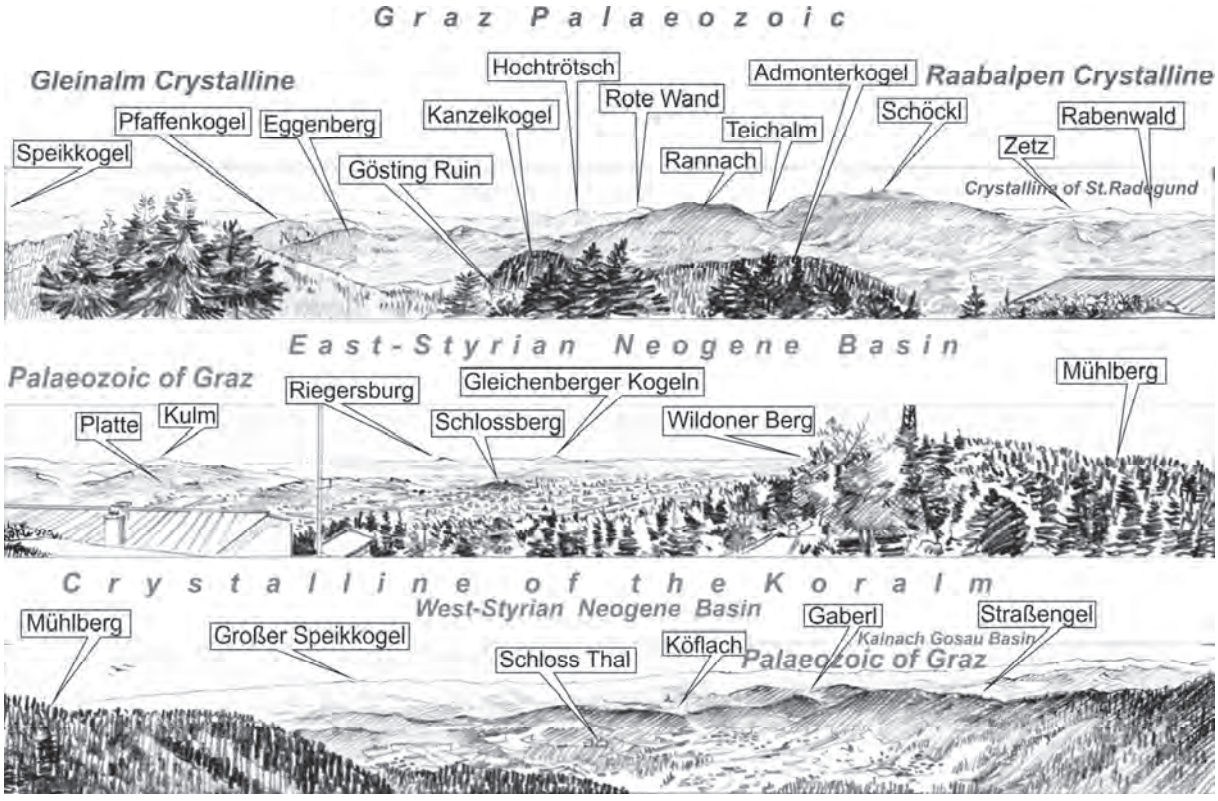

Fig. 7. Panoramic view from the “Fürstenstand”. Main geologic units indicated. Drawing by Fritz Messner.

Already ROLLE (1856: 238) reported from the crest of the Plabutsch lots of fossils (i.e., rugosans, tabulates, stromatoporoids, crinoids, "bivalves") occurring in dark grey limestones and assumed a reef structure. Since these limestones were used as building stones, the walls of the observation tower give an instructive insight into the organic composition of the environment (Fig. 8).

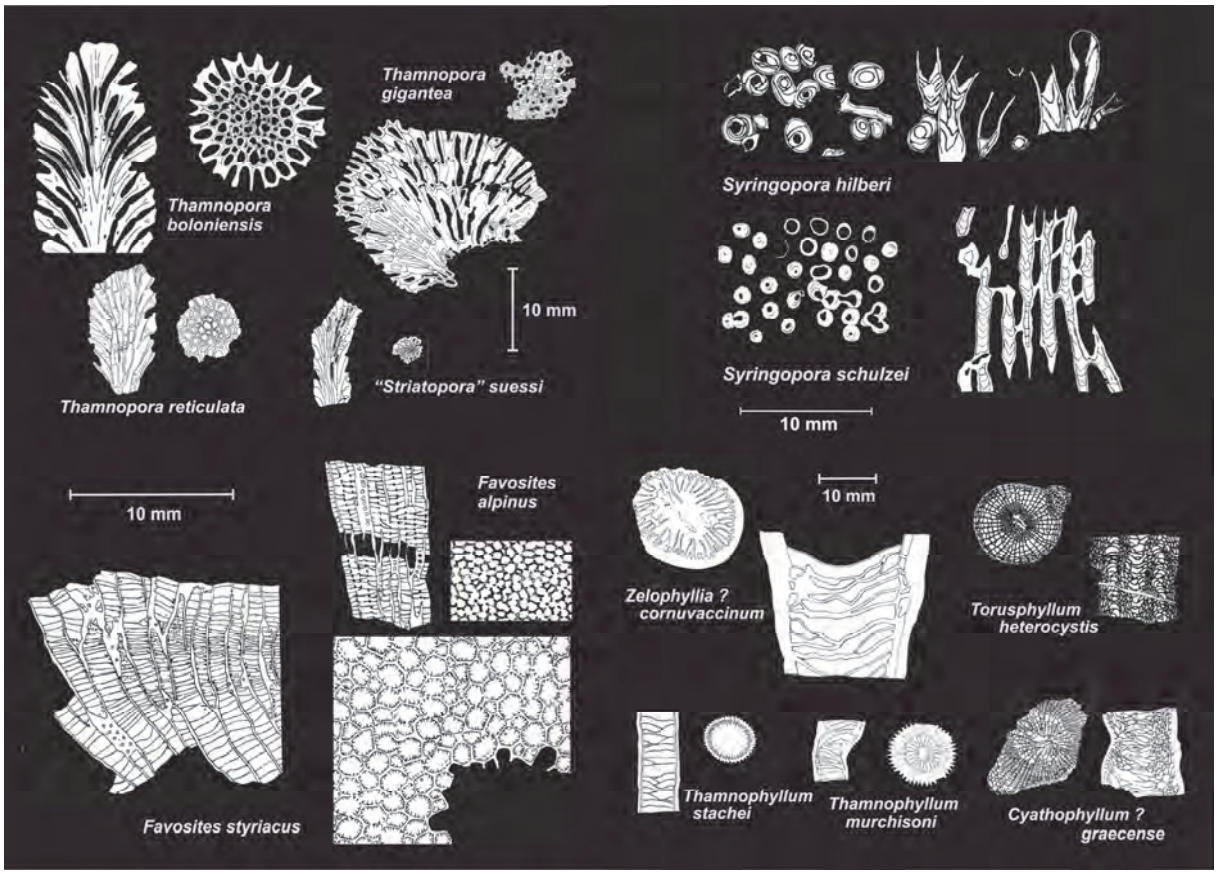

Fig. 8. Sectional images of the most important coral taxa of the Plabutsch Fm. as they can be seen in the building stones at the Fürstenwarte (after EBNER et al., 2000).

One and a half decade before Rolle, Franz Unger (1800–1870), a famous palaeobotanist at the Joanneum in Graz, published in 1843 taxonomic determinations of the following corals and stromatoporoids (UNGER, 1843): *Gorgonia infundibuliformis* GOLDF., *Stromatopora concentrica* GOLDF., *Heliopora interstincta* Bronn (*Astraea porosa* GOLDF.), *Cyathophyllum explanatum* GOLDF., *Cyathophyllum turbinatum* GOLDF., *Cyathophyllum hexagonum* GOLDF., *Cyathophyllum caespitosum* GOLDF., *Calamopora polymorpha* a. var. *tuberosa* GOLDF., *Calamopora polymorpha* b. var. *ramoso - divaricata* GOLDF., *Calamopora spongites* a. var. *tuberosa* GOLDF. and *Calamopora spongites* b. var. *ramose* GOLDF.

Today this listing of taxa is only of historical value. Nevertheless honour is due to Unger having presented the first faunal list of Devonian fossils in Austria. The crest area of the Plabutsch from where the fossils originate is therefore the first area outside Great Britain and Germany where sediments were assigned to the Devonian system. Note that the Devonian period was established by Murchison and Sedgwick only 4 years before in 1839!

References: EBNER & HUBMANN (2012), HUBMANN et al. (2003).