

Säntis Decke) entlang der Säntis Überschiebung, die sich aus einer Transferstörung im Rheintal entwickelt, von ihrer jurassischen Unterlage (Glarner Decke) abgesichert. Mit diesem Modell lassen sich die helvetischen Decken trotz stratigraphisch unterschiedlicher Abscherhorizonte über die West-Ostalpengrenze - das Rheintal - hinweg parallelisieren. Sowohl bezüglich ihrer tektonischen Situation als auch der faziellen Entwicklung sind die Glarner- und die Ostschweizer Säntis Decke ein Äquivalent zur Vorarlberger Säntis Decke. Dasselbe gilt für die Mürtchen Decke im Liegenden der Ostschweizer Säntis Decke und die Hohenemser Decke.

Colins, E., Niederbacher, P. & Sauer, P. (1990). Kohlenwasserstoffexploration in Vorarlberg - Ergebnisse der Bohrung Vorarlberg-Au1. Mitt. österr. geol. Ges., 82, 91-104.

Pfiffner, O.A. (2011): Structural Map of the Helvetic Zone of the Swiss Alps, including Vorarlberg (Austria) and Haute Savoie (France), 1: 100 000. Geological Special Map 128, Explanatory notes

Stratigraphic palaeoecology of Karpatian (Lower Miocene) shallow water deposits of the Korneuburg Basin (Lower Austria)

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In the course of highway constructions a detailed sedimentological transect of 1.8 km length consisting of the estuarine and shallow marine Karpatian (Upper Burdigalian) deposits of the southern Korneuburg Basin in the Central Paratethys was logged near the village of Stetten in Lower Austria. The siliciclastic succession consists of pelitic and sandy sediments and sandstones and is rich in fossils, including sponges, corals, serpulids, molluscs, balanids, echinoderms and fish. A total of 324 sediment- and 118 bulk samples was taken and the faunal composition evaluated in its sedimentological and stratigraphical context. Quantitatively the molluscs dominated and were studied in detail. One hundred-thirty-nine molluscan species were determined from about 19,500 shells. Two gastropod species, *Agapilia pachii* and *Granulolabium binctum* make up more than 53% of the assemblage. Another 11 species each contribute more than 1% to the total molluscan composition, but all other 126 species are quantitatively unimportant. Cluster analyses show the presence of a conspicuous alternation between intertidal and shallow subtidal mollusc associations. Nonmetric multidimensional scaling (NMDS) indicate the presence of an ecological gradient from intertidal to subtidal settings. The intertidal is dominated by the superabundant *Agapilia pachii* and *Granulolabium binctum*, whereas the heavily bioturbated, fully-marine subtidal is characterized by a more diverse assemblage including *Turritella gradata*, *Nassarius edlaueri*, *Loripes dujardini*, *Anadara diluvii* and various venerids. Additionally, layers with large fragments of *Crassostrea* and thin coal deposits with *Terebralia bidentata* are quite abundant in the section. Washed in land snails (Planorbidae) and river snails (Melanopsidae) occur occasionally. This faunal composition, along with its typical alternation, points to a dynamic, subtropical ecosystem in the palaeo-estuary of the southern Korneuburg Basin.