drilling predators from Karpatian (Upper Burdigalian) and Badenian (Lower Langhian) assemblages in the Central Paratethys. There, Karpatian molluscan assemblages occur in restricted, nearshore environments and, compared to the shelf assemblages of the Badenian, are characterized by rather low diversity (species richness and evenness). From the perspective of evolutionary palaeoecology it is of special interest if the low-diversity assemblages of the Karpatian are also characterized by lower predation intensities than their higher diverse open shelf's counterparts from the Badenian.
Drilling frequencies (df) were calculated from three Karpatian (Kleinebersdorf, Neudorf, Laa) and two Badenian localities (Grund, Gainfarn). Somewhat surprisingly two of the low-diversity, nearshore Karpatian localities, Kleinebersdorf (n = 1431, df=18.0%), Neudorf (n=229, df=12.7%), had distinctly higher predation intensities than the two Badenian localities Gainfarn (n=8719, df=6.6%) and Grund (n=4205, df=5.1%), which are in the range of the third Karpatian locality Laa (n=2451, df=5.6%). This pattern is also roughly reflected in predation intensities of the most abundant species, which vary from locality to locality. In the Karpatian assemblages, the most abundant taxa were *Granulolabium bicinctum* (n=465, Kleinebersdorf df=20.3%), *Amalda glandiformis* (n=54, Neudorf, df=7.4%), and *Agapilia pachii* (n=845, Laa, df=2.7%). In the Badenian assemblages the most abundant taxa were *Corbula gibba* (n=5770, Gainfarn, df=6.6%) and *Timoclea marginata* (n=1616, Grund, df=2.6%).
As a preliminary conclusion, drilling frequency appears generally to be patchy in the Miocene of the Paratethys and low-diversity, nearshore assemblages of the Karpatian tend to have higher drilling frequencies than higher diverse open-shelf assemblages of the Badenian.

The Schützen „hot spot": 3D-modelling of a shallow aquifer (Northern Burgenland, Austria)

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Wachtel (1859) reported the temperature of the Schützen sulphur spring 24-26° Reaumur (equalling 30-32° Celsius), and therefore the former thermal spring of Schützen is comparable to the well known occurrences of natural thermal springs in the vicinity of the Leithagebirge. Later on this hot spring cooled down and suddenly disappeared in 1971 when foundation works cut the groundwater flow close to the dome of Leitha limestone formation of the „Kalkofen" quarry (Theuer & Trucksitz 1996). The tectonic situation between the Ruster Höhenzug and the Leithagebirge is quite complex, as can be shown by hybrid seismic sections down to 200 metres, and shallow 2D-resistivity tomography profiles (Scheibz 2006). A high resolution 3D-multielectrode geoelectrical survey in the center of Schützen revealed a detailed insight in the near to the surface aquifer geometry of this former hot sulphur spring. The Upper Miocene of the Schützen region consists of Leitha limestone of Badenian to Sarmatian age which is overlain by Lower Pannonian siltstone and claystone. The profile of a bore hole down to eight metres in the discharge area of the former sulphur spring consists of limestone intercalated with sand and gravel. The karstified aquifer is confined by a layer of about three metres consisting predominantly of siltstone (Kollmann et al. 1990). A raster of seven 2D-sections at a length of 100 to 150 metres each and down to a depth of 14 metres revealed a high resistivity centre where a 3D-block was measured. Resistivity tomography of this block of 2500 m^2 in size, down to a depth of 28 metres shows a complex buckling pattern of higher resistivity beds (consisting of Miocene limestone), overlain by lower resistivity beds interpreted as Pannonian siltstone. From the structural point of view this local buckling of karstified limestone may be due to folding and faulting tectonics, comparable to the local uplift of the Kalkofen-slice north of Schützen.
Mulitielectrode resistivity measurements in the vicinity of the up-lifted Leitha limestone revealed that up-thrusting of Miocene beds is only restricted to a narrow corridor between the Ruster Höhenzug and the Leithagebirge.

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Geologic interpretation of shallow and deep geophysical soundings in the section Leithagebirge - Ruster Höhenzug (Northern Burgenland, Austria)

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DC geoelectric and seismic measurements have been carried out along a profile near the village of Schützen/Northern Burgenland. The profile connected the northeast trending mountain range of the Leithagebirge with the north-south trending „Ruster Höhenzug" that both can be understood as far foothills of the Central Alpine zone. A section of 2000 m starting from north of Schützen and extending up to the Goldberg in the southeast was investigated. The high resolution seismic survey allowed the interpretation as refraction, reflection and refraction tomography. The approximately NW-SE-trending seismic section revealed a cover with p-wave velocity of 800 m (above the ground water table) over a seismic layer with about 1700 m/s (below ground water table) and a maximum depth of 50 m followed by a layer with velocity increasing from 2000 m/s to over 2500 m/s. A prominent reflection signal indicates the interface between first and second layer into the depth. The velocity of the deepest resolved layer, presumptively the basement, was over 2700 m/s. The basement showed a syncline at profile meter 500 and an anticline at 900 m and further not so prominent undulations at longer distances. A more shallow depression is also visible at the interface between first and second layer. As the amplitudes of reflectors are clearly visible also at greater depth of the basement, folding of