

**Chronostratigraphic age:** Eifelian, Givetian?

**Biostratigraphy:** -

**Thickness:** Less than 100 m.

**Lithostratigraphically higher rank unit:** Lantsch Group.

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** Flösserkogel Formation (with tectonic contact).

**Overlying unit(s):** Tyrnaueralm Formation.

**Lateral unit(s):** Zachenspitz Formation.

**Geographic distribution:** Styria, highland in the surroundings of Graz; ÖK50-BMN, map sheet 134 Passail.

**Remarks:** Parts of this formation which contain corals and stromatoporoids resemble the Plabutsch Formation resp. the Tyrnaueralm Formation of the Rannach Group. ZIER (1982) distinguished two parts within the sequence, a lower up to 60 m thick part of the succession which contains considerable amounts of stromatoporoids and corals and an upper part with white fossil-free beds of limestones. FLÜGEL (2000) assigned ZIER's lower part of the formation ("unterer Schweineggkalk") to the Draxler Formation which was synonymised with the Plabutsch Formation by HUBMANN (2003).

**Complementary references:** GOLLNER & ZIER (1985).

#### Rotmüller-Formation / Rotmüller Formation

BERNHARD HUBMANN

**Validity:** Valid; first description and formalization by EBNER (1998: p. 128).

**Type area:** ÖK50-UTM, map sheet 4222 Leoben (ÖK50-BMN, map sheet 163 Voitsberg).

**Type section:** No type section published because of bad outcrops; according to EBNER (1998) on both sides of the Arzbach valley from "Reicherhöhe" (998 m; N 47°12'24" / E 15°14'23") in the southwest to "Rathlosgraben" in the northeast and in the vicinity of the farmstead "Rotmüller" (N 47°14'54" / E 15°14'52") on ÖK50-BMN, map sheet 163 Voitsberg typical outcrops of the formation may be seen.

**Reference section(s):** See above; forest road west of Reicherhöhe at altitude 880 m (EBNER, 1998)

**Remarks:** The Formation may be a lateral equivalent of the Tyrnaueralm Formation (EBNER, 1998: p. 128).

**Derivation of name:** After the farmstead "Rotmüller" 40 km northwest of Graz.

**Synonyms:** -

**Lithology:** Massive light to dark grey dolostones.

**Fossils:** Stromatoporoids (especially amphiporids), rugose and tabulate corals, crinoids, brachiopods.

**Origin, facies:** Subtidal depositional environment.

**Chronostratigraphic age:** ?Eifelian – Givetian.

**Biostratigraphy:** -

**Thickness:** About 300 m.

**Lithostratigraphically higher rank unit:** Lantsch Group.

**Lithostratigraphic subdivision:** -

**Underlying unit(s):** Flösserkogel Formation (tectonic contact).

**Overlying unit(s):** Fahrneck Formation.

**Lateral unit(s):** Zachenspitz Formation?

**Geographic distribution:** Styria, highland in the surroundings of Graz; ÖK50-BMN, map sheet 134 Passail.

**Remarks:** -

**Complementary references:** FLÜGEL (2000).

#### Kollerkogel-Formation / Kollerkogel Formation

BERNHARD HUBMANN

**Validity:** Valid; first entry by SUESS (1868: "ungeschichteter, ... lichtgrauer Kalkstein, welcher ... an den Westhängen des Kollerberges ... entblößt ist"); formalized by FLÜGEL (2000: p. 25–26; Kollerkogel-Formation).

**Type area:** ÖK50-UTM, map sheet 4229 Graz (ÖK50-BMN, map sheet 164 Graz).

**Type section:** No type section defined, but FLÜGEL (2000) selected a type region at Kollerkogel (Kollerberg, 633 m) (N 47°03'46" / E 15°22'35"), a hill belonging to the Plabutsch-Buchkogel-Range west of Graz.

**Reference section(s):** -

**Derivation of name:** After the hill Kollerberg (633 m) west of Graz.

**Synonyms:** Helle Kalke (KUNTSCHNIG, 1937); Helle Kalke des Mitteldevon (SCHÄFER, 1937); partly: Korallenkalk (CLAR, 1874) and Mitteldevon-Gruppe (VACEK, 1891).

**Lithology:** Grey dolomites with biolaminations, light bluish limestones (mostly mudstones), locally bioclastic limestones with chert nodules.

**Fossils:** Rugose and tabulate corals, stromatoporoids, conodonts.

**Origin, facies:** Major parts of the sequence developed in an open platform setting; basal parts are shallow restricted lagoonal deposits due to biolaminations, emersion horizons and pseudomorphs after gypsum.

**Chronostratigraphic age:** Givetian–Frasnian.

**Biostratigraphy:** *varcus* Zone; *asymmetricus* to *triangularis* conodont zones.

**Thickness:** Strong variation in thickness; about 150 m.

**Lithostratigraphically higher rank unit:** Rannach Group.

**Lithostratigraphic subdivision:** FLÜGEL (2000) included four members in the Kollerkogel Formation.

Gaisbergsattel Member: dark grey biolaminated dolostones; about 20 m (up to 100 m) in thickness.

Kanzel Member: light grey to bluish limestones; mostly mudstones; up to 100 m in thickness.

Platzl Member: sequence of grey limestones intercalated with carbonatic argillaceous shales; about 50 m in thickness.

Platzlkogel Member: grey limestones (in some places biohermal structures); about 75 m in thickness.

**Underlying unit(s):** Plabutsch Formation (conformable contact).

**Overlying unit(s):** Steinberg Formation (conformable contact).

**Lateral unit(s):** ?Plabutsch Formation.

**Geographic distribution:** Styria, highland in the surroundings of Graz; ÖK50-BMN, map sheets 134 Passail, 163 Voitsberg, 164 Graz.

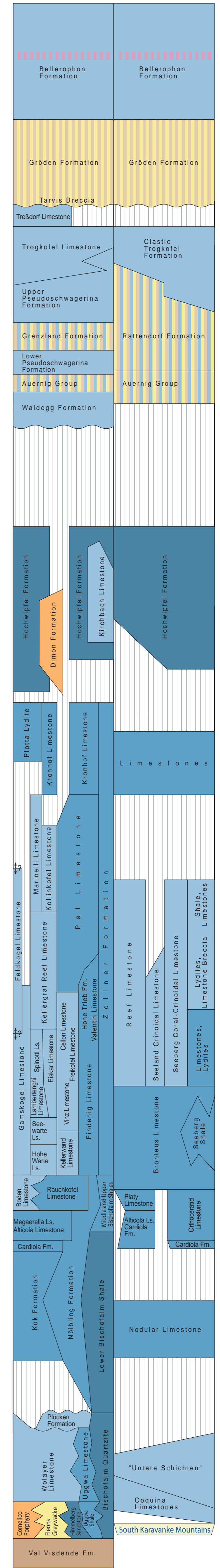
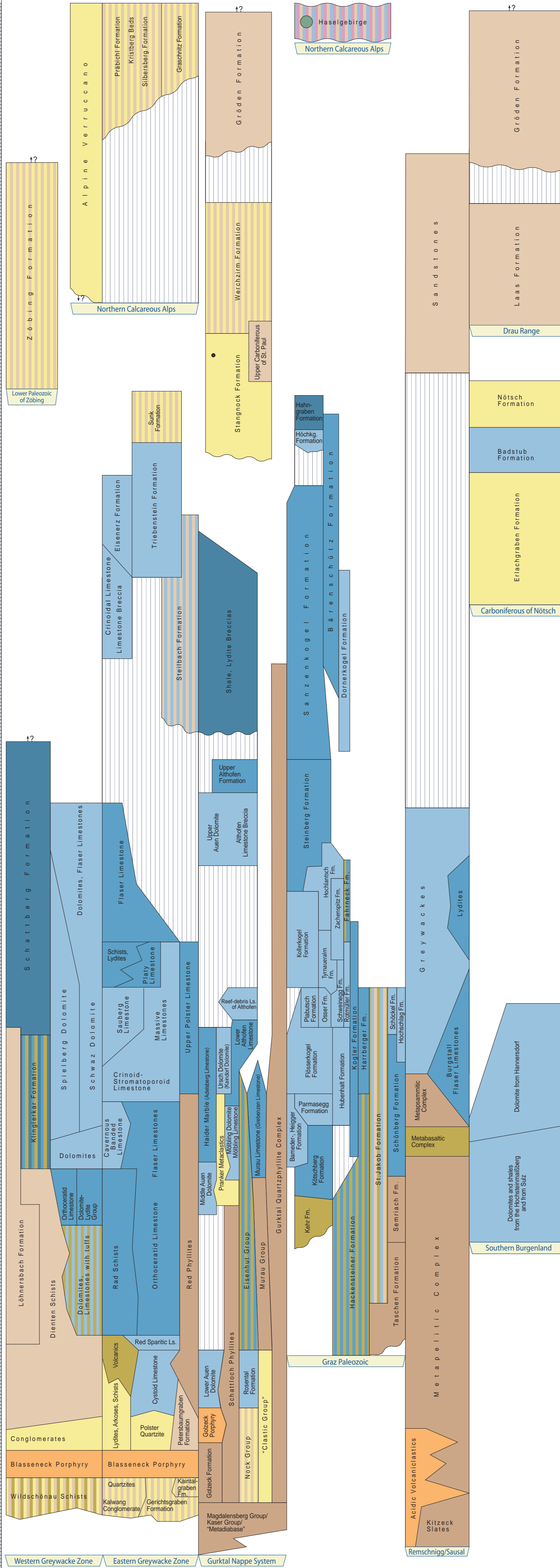
# Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission



ERA / SYSTEM / PERIOD / SERIES / EPOCH	Global Classification		DURATION Ma
	STAGE / AGE	TIME Ma	
PERMIAN	UPPER PERMIAN / GUADALUPIAN / LOPINGIAN	CHANGHSINGIAN / Dorashanian	251
		WUCHIANGIAN / Dufuian	255
		CAPITANIAN	260
		WORDIAN	265
		ROADIAN	270
	LOWER PERMIAN / CISURALIAN	KUNGURIAN	275
		ARTINSKIAN	280
		SAKMARIAN	285
		ASSELIAN	290
		295	
CARBONIFEROUS	UPPER CARBONIFEROUS / PENNSYLVANIAN	GZHELIAN	299
		KASIMOVIAN	305
		MOSKOVIAN	310
		BASHKIRIAN	315
		SERPUKHOVIAN	320
	LOWER CARBONIFEROUS / MISSISSIPPIAN	VISEAN	325
		TOURNAISIAN	335
		345	
		350	
		355	
DEVONIAN	UPPER DEVONIAN	FAMENNIAN	359.2
		FRASNIAN	370
		GIVETIAN	385
		EIFELIAN	395
		EMSIAN	405
	LOWER DEVONIAN	PRAGIAN	410
		LOCHKOVIAN	415
		LUDFORDIAN / GORSTIAN	420
		HOMERIAN / SHEINWOOD	425
		WEN-LOCK / LOW	430
SILURIAN	UPPER ORDOVICIAN	LLANDOVERY	435
		AERONIAN	440
		RHUDDANIAN	445
		HIRNANTIAN	450
		455	
	MIDDLE ORDOVICIAN	DARRIWILIAN	460
		465	
		470	
		475	
		480	
CAMBRIAN	UPPER CAMBRIAN	TREMACIAN	485
		PAIBIAN	495
		500	
		505	
		510	
	MIDDLE CAMBRIAN	515	
		520	
		525	
		530	
		535	
LOWER CAMBRIAN	540		
	542		



**Legend**

- pelagic, offshore, siliciclastic
- pelagic, nearshore, calcareous
- shallow marine, neritic
- terrestrial-continental, coarse clastic
- terrestrial-continental, fine clastic
- evaporite (chloride, sulphate)
- rhyolite, dacite
- (basaltic) andesite, trachyandesite
- basalt
- phyllite
- mixed-facies (in corresponding colors)
- coal (may include several seams)
- ? position/age doubtful/controversial
- | equal units
- \ older unit left | younger unit right
- hiatus
- unconformity
- GSSP
- Fm. Formation
- Ls. Limestone

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Cutout and English adaptation of the "Die Stratigraphische Tabelle von Österreich 2004": Geological Survey of Austria

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