

***Prolagus oeningensis* (Lagomorpha, Mammalia)**
from the Middle Miocene of Mühlbach am Manhartsberg,
Lower Austria

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(With 1 textfigure and 1 table)

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Zusammenfassung

Das bearbeitete Material stammt von der Fundstelle Mühlbach a. Manhartsberg (Proben: Mü 1, Mü 2). Es umfaßt 72 Einzelzähne, die alle eindeutig der Art *Prolagus oeningensis* (KÖNIG 1825) zugeordnet werden können. Dies ermöglicht eine stratigrafische Eingrenzung der Fauna auf die Säugetierzonen MN4 bis MN9.

Summary

The locality Mühlbach (samples: Mü 1 and Mü 2) yielded 72 individual teeth of *Prolagus oeningensis* (KÖNIG 1825). The occurrence of *P. oeningensis* stratigraphically limits the fauna to the mammal units MN4-MN9.

Introduction

The fossils stem from the locality Mühlbach am Manhartsberg in the Molasse zone of Lower Austria (Fig. 1). The fossil finds were discovered in 1996 by Dr. R. Roetzel, Geological Survey Vienna, and were collected together with members of the Natural History Museum Vienna. The fauna comprises marine and terrestrial organisms, of which the pikas (Ochotonidae) are examined in the present contribution. A total of 72 complete individual teeth and numerous tooth fragments were investigated. As no morphological and metric difference was determined between the teeth from sample Mü 1 (26 individual teeth) and sample Mü 2 (46 individual teeth), they are treated here as a unit with regard to measurements and descriptions. This contribution is part of FWF-Project P 15724 (Fonds zur Förderung der wissenschaftlichen Forschung, Project leader: G. Daxner-Höck). For localization see Fig. 1.

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Systematic section

Lagomorpha BRANDT 1855

Ochotonidae THOMAS, 1897

Prolagus POMEL, 1853

Prolagus oeningensis (KÖNIG, 1825) (Tab. 1)

M a t e r i a l: 26 individual teeth from Mü 1 and 46 individual teeth from Mü 2: Coll. NHMW 2002z0137/0001

M e a s u r e m e n t s (in mm):

Tab. 1: Measurements for *Prolagus oeningensis* from Mühlbach (only complete teeth were evaluated)

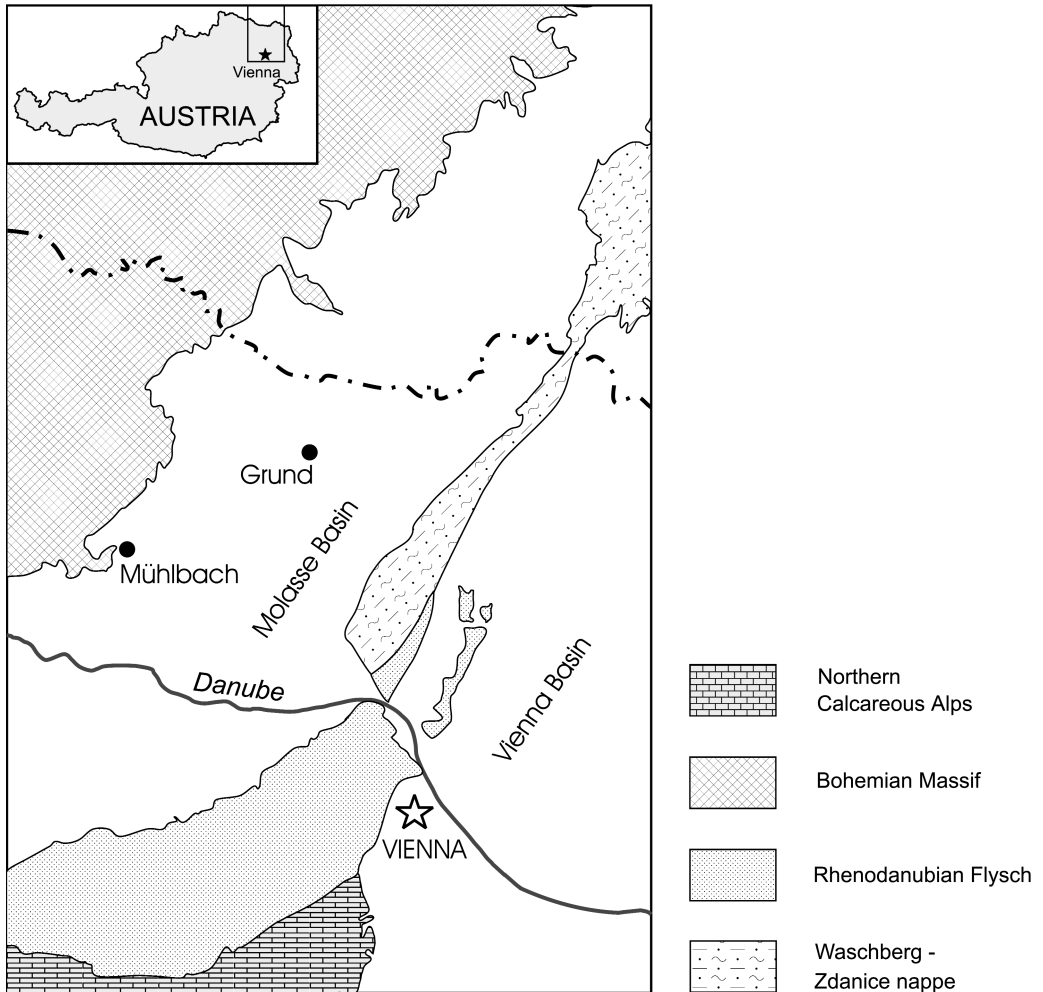
	Length			N	Width		
	min.	max.	mean		min.	max.	mean
P2	0.68	0.77	0.70	3	1.09	1.37	1.30
P3	1.10	1.45	1.40	3	1.41	2.10	1.95
P4	1.30	1.60	1.42	3	1.50	1.70	1.65
M1	1.10	1.45	1.38	4	1.20	1.99	1.80
M2	1.10	1, 1	1.39	4	1.19	2.00	1.89
p3	1.54	1.83	1.69	8	1.23	1.73	1.49
p4	1.23	1.47	1.28	6	1.22	1.70	1.39
m1	1.36	1.63	1.46	6	1.46	1.90	1.50
m2	1.67	2.01	1.85	6	1.40	2.02	1.72

L o c a l i t y: Mühlbach am Manhartsberg, Lower Austria, samples Mü 1 and Mü 2. Marine sands of the Gaidorf Formation, Grund Layers, Middle Miocene.

Type locality of *Prolagus oeningensis*: Oeningen, Germany

Description:

All permanent teeth are hypsodont. The outline of the lower **p3** is triangular. The anteroconid is generally round, occasionally somewhat acuminate labially and lingually. As a rule, a small spur is visible at the end of the protoconid. **p4** and **m1** of the lower tooth row are characterized by two rhomboid prisms. **m2** bears 3 prisms that become smaller posteriorly. The upper **P2** has an oval outline and bears a distinct posterior inner edge. Two anteriorly open, parallel synclines separate the 3 ridges. The outline of the upper **P3** is triangular. The posterior lobe extends to the labial edge. The labial and the middle synclines are opened labially. The outline of the upper **P4**, **M1** and **M2** is elongate oval. **P4** has a pointed labial posterior side, and the labial and the middle synclines are closed. The primitive dental pattern in **M1** is moderately, in **M2** only weakly visible.



Discussion

Based on the above-described morphological features, the investigated material is placed to the genus *Prolagus*. The potential species temporally and metrically/morphologically – *P. vasconiensis*, *P. oeningensis*, *P. tobieni*, *P. major* and *P. schnaitheimensis* – are discussed here: the P3/p3- have a triangular outline. This excludes the species *P. vasconiensis*. *P. tobieni* and *P. major* are potential candidates based on their temporal distribution, but *P. tobieni* is smaller and *P. major* is much larger than *Prolagus* from Mühlbach. As accessory enamel folds are missing in the Mühlbach material, *P. schnaitheimensis* must also be excluded. Both the tooth measurements and the morphology point to *P. oeningensis*.

Compared with *P. oeningensis* from the Karpatian of the Korneuburg Basin (Teiritzberg; BOON-KRISTKOIZ 1998) and from the Badenium of Mühlbach, the teeth from Teiritzberg

are somewhat smaller and morphologically more primitive than those of Mühlbach. This species variation would clearly correspond with the age difference between the two faunas. The stratigraphic range of *Prolagus oeningensis* extends from the Lower Miocene (MN4) to the Upper Miocene (MN9).

References

- BOON-KRISTKOIZ, E.M. (1998): Säugtiere (Mammalia) aus dem Karpat des Korneuburger Beckens – 2. Lagomorpha. – Beitr. Paläont., **22**: 363-366, 1 Fig., 1 Tab. – Wien.