

Supplementary: Hoof Growth Rates of the European Roe Deer (*Capreolus capreolus*) for Dating the Hoof's Isotopic Archive

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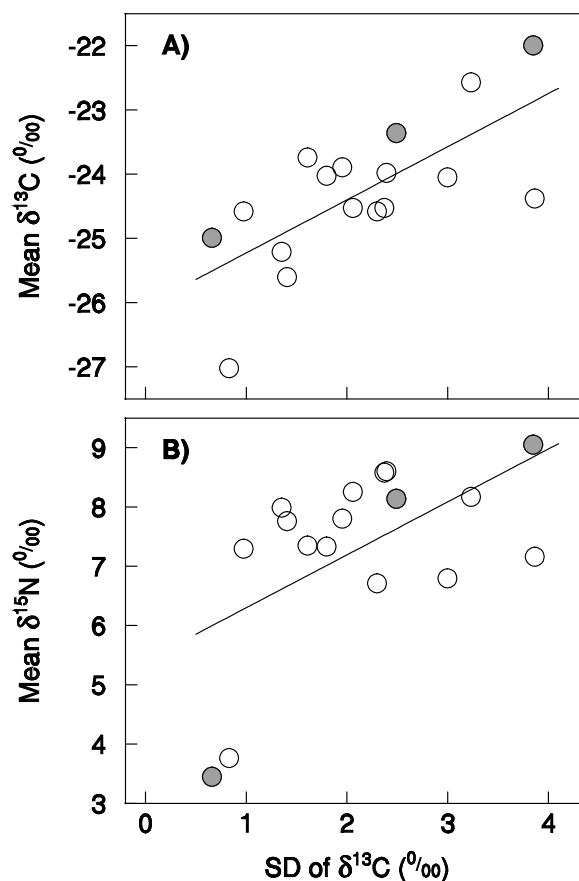


Figure S1: Relation between the seasonal variation of $\delta^{13}\text{C}$ (quantified as standard deviation SD) and the mean $\delta^{13}\text{C}$ (A) and the mean $\delta^{15}\text{N}$ (B) in hoof keratin. The lines are linear regressions (A: $R^2 = 0.496$, $p < 0.01$; B: $R^2 = 0.326$, $p < 0.05$). Grey filled symbols denote animals shown in Fig. 4.

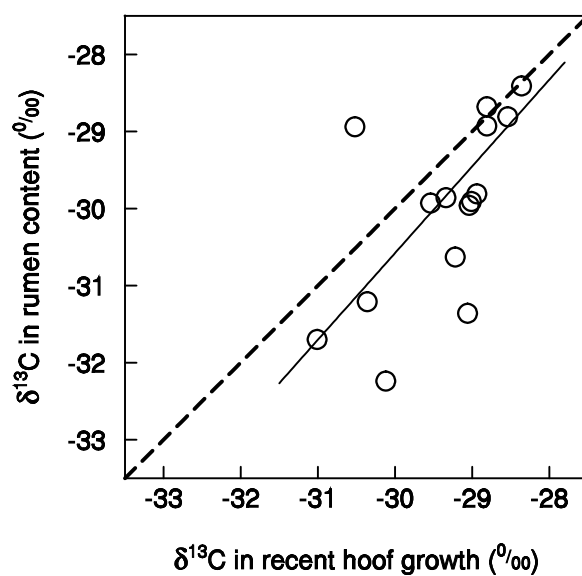


Figure S2: Comparison of $\delta^{13}\text{C}$ of the rumen content and $\delta^{13}\text{C}$ of the youngest millimeter of the hoof wall close to the periople; $\delta^{13}\text{C}$ of the hoof is adjusted by a diet-keratin shift of 2.7 ‰ [21]. Dashed line shows unity; solid line is a linear regression ($y = 1.12x + 3.17$; $R^2 = 0.396$, $p < 0.01$).

Table S1: Statistical parameters (mean, standard, deviation, youngest increment and range) of isotope ratios ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) in hooves of 17 analyzed roe deer. Horizontal lines separate groups with clear end of maize feeding, second peak of maize feeding and weak peak of maize feeding.

Animal	$\delta^{13}\text{C}_{\text{mean}}$ [‰]	SD $\delta^{13}\text{C}$ [‰]	1. Increment $\delta^{13}\text{C}$ [‰]	$\delta^{13}\text{C}_{\text{max-min}}$ [‰]	$\delta^{15}\text{N}_{\text{mean}}$ [‰]	SD $\delta^{15}\text{N}$ [‰]	1. Increment $\delta^{15}\text{N}$ [‰]
#216	-22.0	3.8	-26.2	11.3	9.0	1.5	9.8
#225	-22.6	3.2	-27.5	9.8	8.2	1.1	6.7
#119	-23.9	2.0	-25.8	6.4	7.8	0.5	7.0
#128	-24.0	2.4	-26.0	6.8	8.6	0.8	8.3
#132	-24.0	1.8	-25.5	5.3	7.3	0.7	7.7
#131	-24.0	3.0	-26.3	7.7	6.8	0.6	5.7
#222	-24.4	3.9	-26.5	10.3	7.2	0.7	6.7
#231	-24.5	2.1	-27.4	6.3	8.3	1.1	9.9
#207	-24.5	2.4	-27.1	7.4	8.6	1.7	10.0
#136	-24.6	2.3	-26.1	7.1	6.7	0.6	6.5
#142	-25.2	1.4	-25.9	4.3	8.0	0.7	7.2
#141	-25.6	1.4	-25.8	4.3	7.8	1.0	6.2
#228	-23.4	2.5	-26.0	7.1	8.1	1.1	9.0
#134	-23.7	1.6	-25.7	5.2	7.3	0.8	8.6
#118	-24.6	1.0	-25.4	3.8	7.3	0.5	7.4
#138	-25.0	0.7		2.4	3.4	0.4	
#212	-27.0	0.8	-28.0	2.8	3.8	3.1	8.9
Min	-27.0	0.7	-28.0	2.4	3.4	0.4	5.7
Mean ± SD	-24.3 ± 1.1	2.1 ± 1.0	-26.3 ± 0.8	6.4 ± 2.5	7.3 ± 1.5	1.0 ± 0.6	7.9 ± 1.4
Max	-22.0	3.9	-25.4	11.3	9.0	3.1	10.0