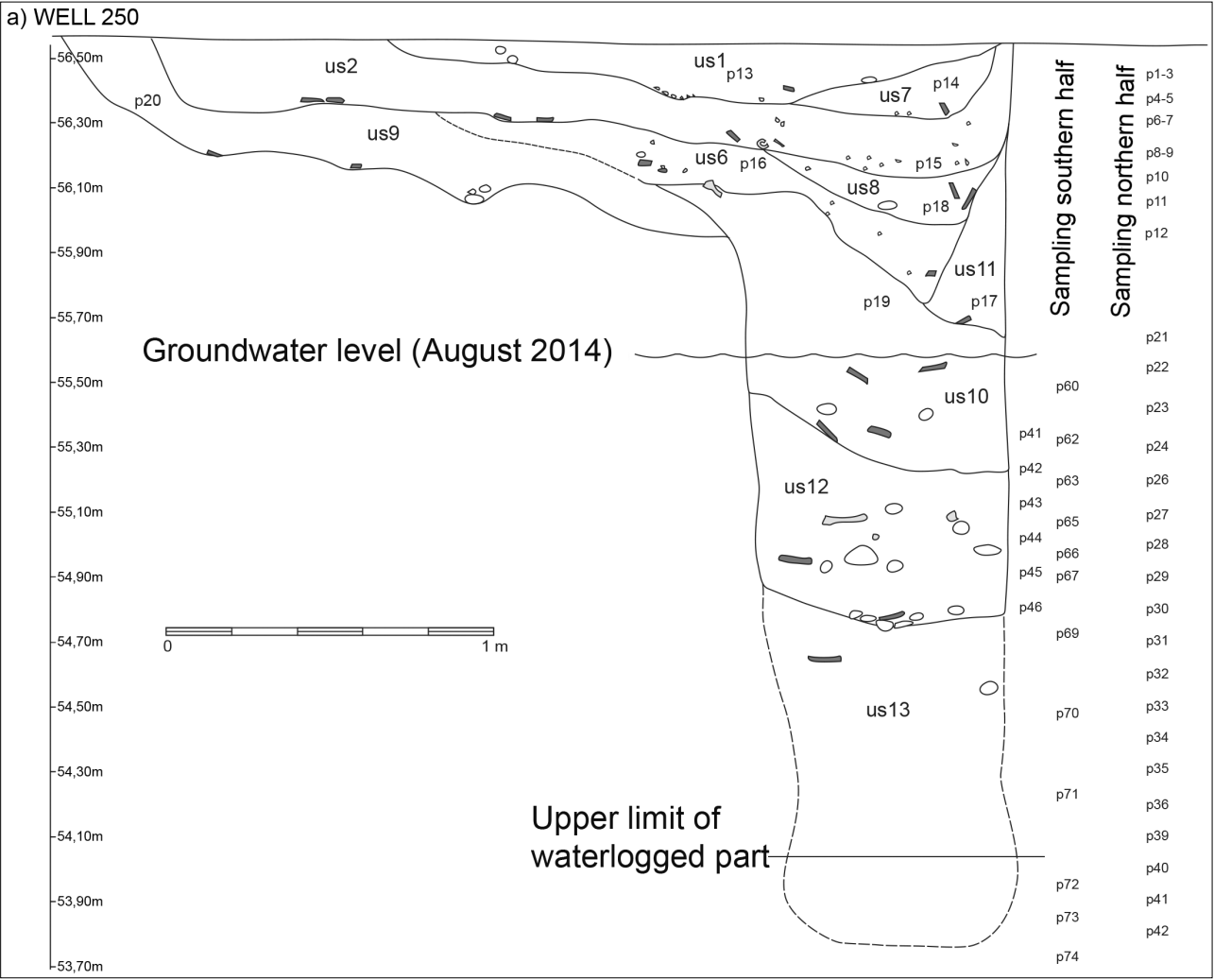
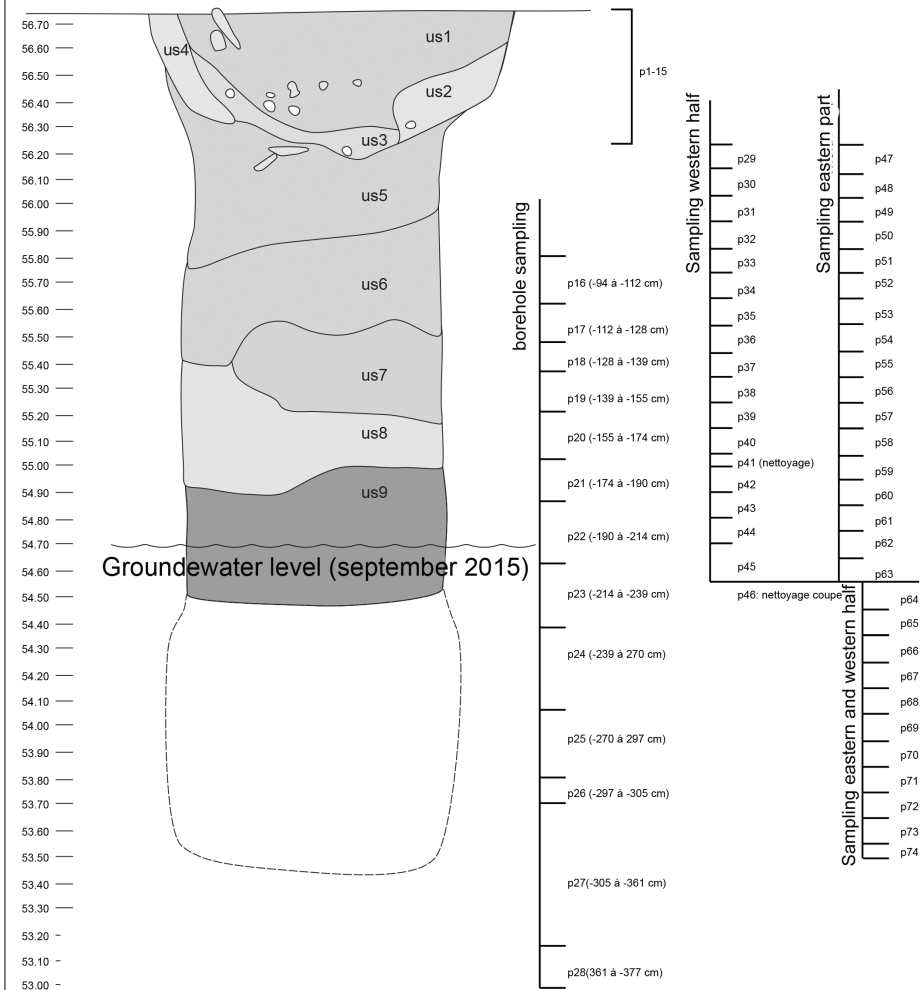


**Supplementary Materials:**

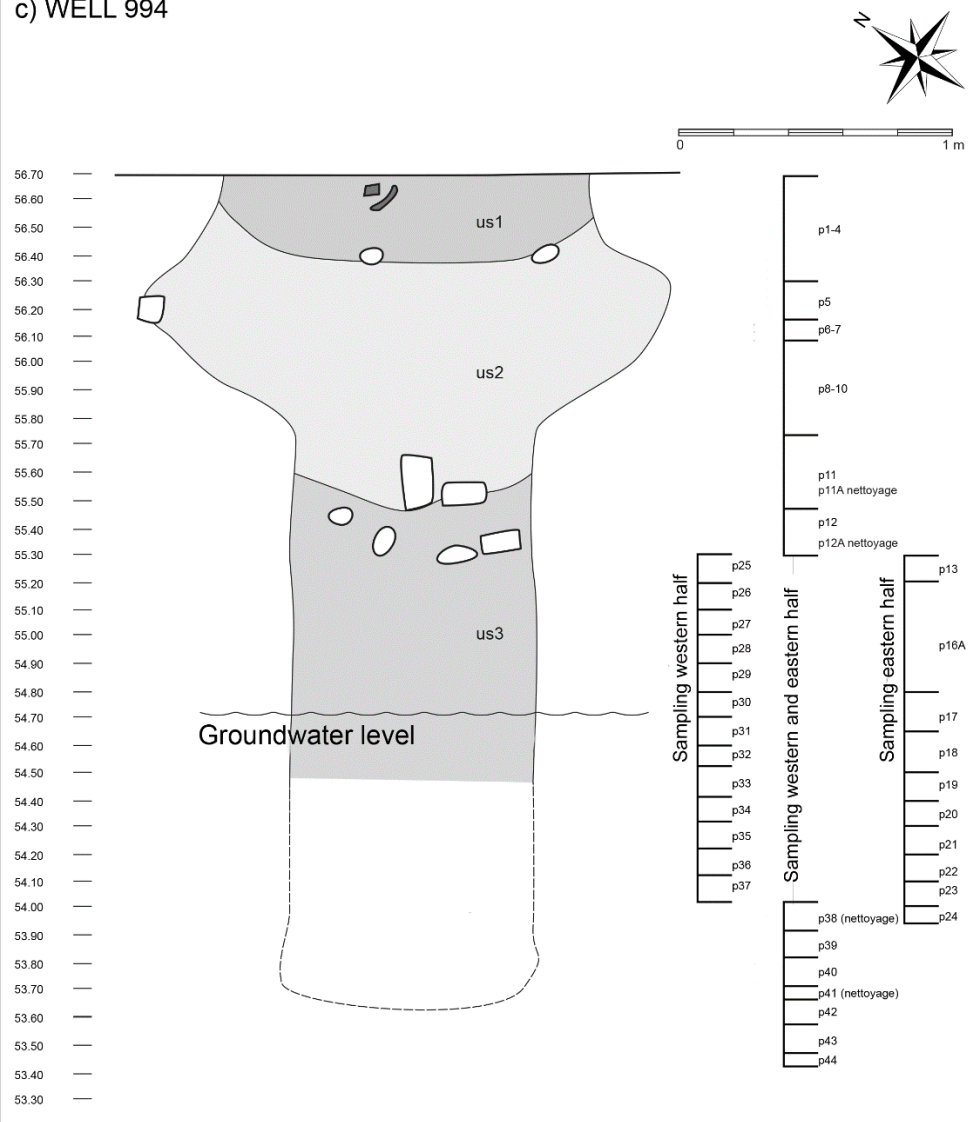
**Figure S1 a, b, c:** Section of well 250 (a), 990 (b) and 994 (c) with height information (m) and sequence of samples from top to bottom, dug spits (20-10 cm artificial levels). The investigation of small mammals and invertebrates was carried out in the lowest, waterlogged layers. US = stratigraphic unit. From: van Willigen et al. 2020 [23] simplified.



b) WELL 990



c) WELL 994



**Table S1:** Summery table of semi quantified elements present in the organic fractions of the sieved sediment samples with an interpretation of the quality of preservation (see criteria in [79], total volume (l) of sediment samples and the examined sample volumes and fractions for invertebrate and small mammal remains.

Well	Sample Nr.	Maximum depth (m asl)	Minimum depth (m asl)	Sediment sample total volume (l)	Pretreatment	Water-logged preservation	Observations during sorting organic fractions						Invertebrate remains		Small mammal remains	
							Dung	Quality preservation (plant remains)	Molluscs	Bones	Insects	Bioturbation (roots)	Examined volume (l) organic fraction	Analysed organic fractions for	Examined volume (l) inorganic fraction	Analysed inorganic fractions
250	24	55.47	55.37	17	Freezing	yes		very bad					17	0.35 mm		
250	27	55.27	55.17	14	-	yes		very bad	abundant	abundant	present		14	0.35 mm		
250	28	55.17	55.07	12.5	-	yes		very bad	abundant	abundant			12.5	0.35 mm		
250	32	54.77	54.67	28	Freezing+Calgon	yes	charred	very bad					28	0.35 mm		
250	33	54.67	54.57	26.5	Freezing+Calgon	yes		very bad	abundant	present	present		26.5	1/0.35 mm		
250	34	54.57	54.47	29	Freezing+Calgon	yes		very bad	abundant	abundant	present		29	1/0.35 mm		
250	36	54.37	54.27	7.5	Freezing	yes	present	medium			present	yes	7.5	1/0.35 mm		
250	37	no info	no info	3	Freezing	yes		low				yes	3	0.35 mm		
250	38	54.27	54.17	26	Freezing+Calgon	yes	present	medium			present	yes	6	1/0.35 mm		
250	39	54.17	54.07	29.5	Freezing	yes	present	medium	present	medium	present	yes	6	4/1/0.35 mm		
250	40	54.07	53.97	21.5	Freezing	yes	present	good	abundant		present	yes	6	4/1/0.35 mm	15.5	4/1 mm
250	41	53.97	53.87	23.5	Freezing	yes	present	good	present		present	yes	7	1/0.35 mm	23	4/1 mm
250	42	53.87	53.8	14	Freezing	yes	present	medium	present		present	yes	6	1/0.35 mm	8	4/1 mm
250	73	53.97	53.77	23.5	Freezing	yes	present	medium		present		yes			23.5	4/1 mm
250	74	53.77	no info	8	Freezing	yes	present	medium	abundant	present	abundant	yes			8	4/1 mm
990	25	53.8	54.06	0.9	Calgon	yes	abundant	medium	present	abundant	abundant	yes			0.9	4/1 mm
990	26	53.72	53.8	0.4	Calgon	yes				present	abundant		0.4	4/1/0.35 mm	0.4	4/1 mm
990	28	53	53.16	0.4	Calgon	yes				present	present		0.4	4/1/0.35 mm		
990	68	54.06	54.16	59	-	no					present	yes	8	0.35 mm	50	4/1 mm
990	69	53.94	54.06	28	-	yes	abundant	good			abundant	yes	7	1/0.35 mm	28	4/1 mm
990	70	53.84	53.94	88	Calgon	yes	abundant	good		present	very abundant	yes	9	4/1/0.35 mm	88	4/1 mm
990	71	53.76	53.84	84.5	-	yes	abundant	good		present	abundant		7	4/1/0.35 mm	63.5	4/1 mm
990	72	53.66	53.76	78.5	-	yes	present	good			present	yes	8	4/1/0.35 mm	56	4/1 mm
990	73	53.58	53.66	26	Calgon	yes	present	good	present	abundant	abundant		9	4 mm	26	4/1 mm
990	74	53.5	53.58	34	-	yes	very abundant	excellent			very abundant		9	4/1/0.35 mm	34	4/1 mm
994	20	54.3	54.42	0.2	Freezing	yes	no	low	no	no	abundant		0.2	1/0.35 mm		
994	41	53.7	53.72	31.5	Freezing +Calgon	yes	no	low	abundant	present	very abundant		16	1/0.35 mm	31.5	4/1 mm
994	42	53.6	53.7	53.5	Freezing+Calgon	yes	present	medium	abundant	abundant	abundant	yes	16	4/1/0.35 mm	53.5	4/1 mm
994	43	53.5	53.6	54.5	Freezing+Calgon	yes	no	low	abundant	present	abundant		17	4/1/0.35 mm	47	4/1 mm
994	44	53.65	53.5	32.5	Freezing	yes	no	low	abundant		abundant		18	4/1/0.35 mm	23.5	4/1 mm
994	45	53.6	no info	17	Freezing	yes	no	low	abundant		abundant		17	4/1/0.35 mm	8	4/1 mm

**Figure S2:** Single plots of the radiocarbon dates of 250, 990 and 994 wells. In red are indicated the *Apodemus* and *Apodemus/Muridae*. Calibration with OxCal v4.4.4 (Bronk Ramsey 2009) [80] and IntCal20 atmospheric curve (Reimer et al. 2020) [81].

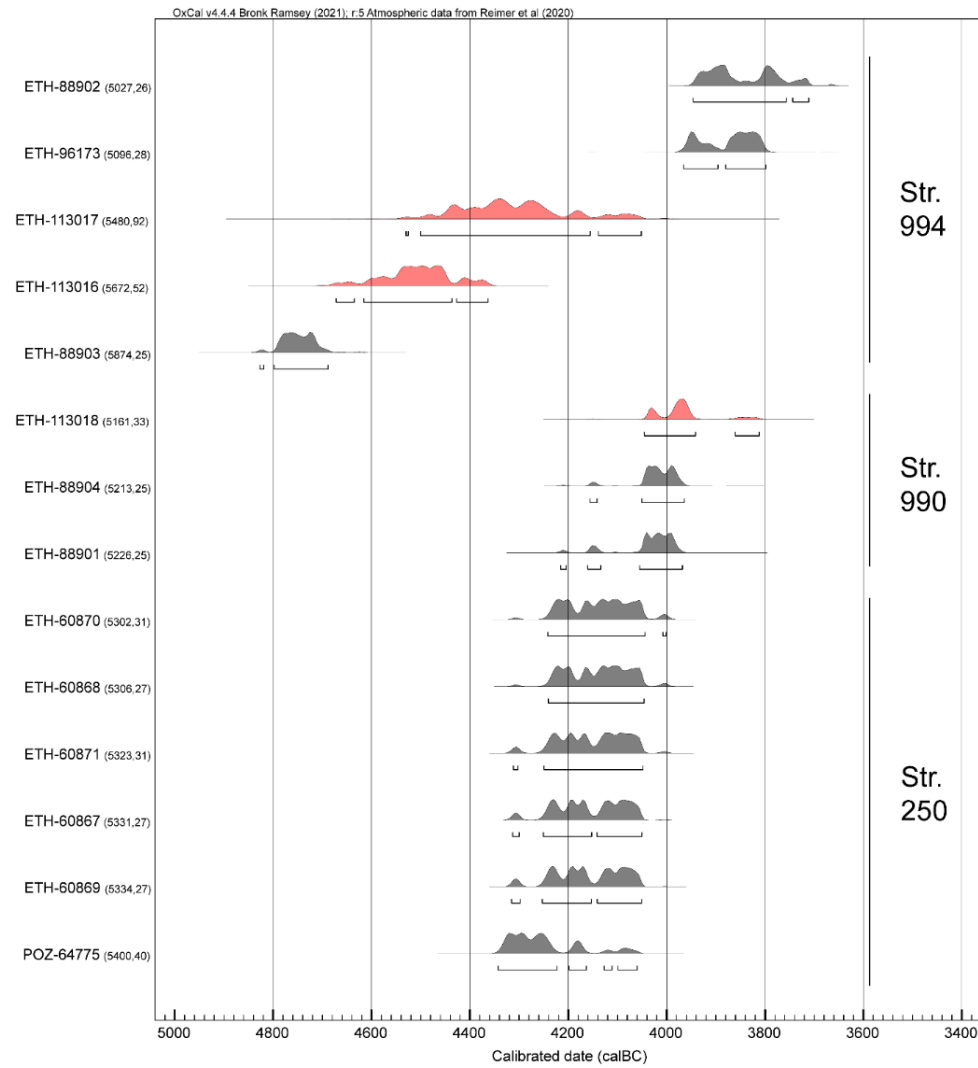


Figure S3: Contemporary test results for 250, 990 and 994 wells

well 250

Structure	Sample	Specie	Lab code	BP	±	δ <sup>13</sup> C (‰)	C/N	Method	cal BC 2σ	Observations	Reference
250	Grain	Cerealia	ETH-60867	5331	27	-21.4	nd	AMS	4314 -4051		Martínez-Grau et al. 2020
250	Fruit	<i>Corylus avellana</i>	ETH-60868	5306	27	-24	nd	AMS	4241 -4047		Martínez-Grau et al. 2020
250	Grain	Cerealia	ETH-60869	5334	27	-20.5	nd	AMS	4316 -4052		Martínez-Grau et al. 2020
250	Grain	<i>Triticum</i> sp.	ETH-60870	5302	31	-22.4	nd	AMS	4242 -4001		Martínez-Grau et al. 2020
250	Grain	Cerealia	ETH-60871	5323	31	-24.2	nd	AMS	4312 -4049		Martínez-Grau et al. 2020
250	Grain	<i>Triticum</i> sp.	POZ-64775	5400	40	nd	nd	AMS	4344 -4061		Martínez-Grau et al. 2020

X <sup>2</sup> test	df	T	p-value (5%)		BP	SD	cal BC (95.4%)
well 250	2	4.7	11.1		5327	13	4236-4057

X2 test

df = 5      T = 4.7    p-value (5%) = 11.1  
well 250 = 5327BP, 13SD = 4236-4057 cal BC (95.4%)

well 990

Structure	Sample	Specie	Lab code	BP	±	δ <sup>13</sup> C (‰)	C/N	Method	cal BC 2σ	Observations	Reference
990	Grain	<i>Triticum aestivum /durum /turgidum</i>	ETH-88901	5226	25	-24.6	18.62	AMS	4216 -3969		Martínez-Grau et al. 2020
990	Grain	<i>Triticum aestivum /durum /turgidum</i>	ETH-88904	5213	25	-24.8	18.96	AMS	4157 -3965		Martínez-Grau et al. 2020
990	Bone	<i>Apodemus / Muridae</i>	ETH-113018	5161	33	-19.8	2.8	GIS	4046 -3812	C/N ratio out of range	this paper

X <sup>2</sup> test	df	T	p-value (5%)		BP	SD	cal BC (95.4%)
well 990	2	2.6	6.0		5207	16	4046-3972

X2 test

df = 2      T = 2.6    p-value (5%) = 6.0  
well 990 = 5207BP 16SD = 4046-3972 cal BC (95.4%)

well 994

Structure	Sample	Specie	Lab code	BP	±	δ <sup>13</sup> C (‰)	C/N	Method	cal BC 2σ	Observations	Reference
994	Grain	<i>Triticum monococcum</i>	ETH-88902	5027	26	-16.3	36.72	AMS	3947 -3712		Martínez-Grau et al. 2020
994	Grain	<i>Triticum monococcum</i>	ETH-96173	5096	28	-23.7	15.3	AMS	3967 -3799		Jesus et al. 2021

X <sup>2</sup> test	df	T	p-value (5%)		BP	SD	cal BC (95.4%)
well 994	1	3.3	3.8		5059	20	3949-3796