

**[Supplementary material]**

**Reopening graves in the early middle ages: from local practice to European phenomenon**

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**Table S1. Early medieval cemeteries with reopening evidence: datasets from each author.**

Reference	Site name	Region, country	Years of excavation	Centuries (AD) of site use	Percentage of graves with evidence of probable or definite early reopening	No. of graves with evidence of probable or definite early reopening	No. of inhumations with accessible records
Aspöck (2005, 2011)	Brunn am Gebirge, Flur Wolfholz	Lower Austria, Austria	1997	Sixth	98	41	42
Aspöck (2011)	Winnall II	Hampshire, England	1957–1958	Mid seventh to beginning of eighth	Up to 55	Up to 25	45
Klevnäs (2013)	Bradstow School, Broadstairs	Kent, England	1910, 1911, 1970–1974	Late sixth to late seventh	20	18	89
	St Peter's Tip, Broadstairs	Kent, England	1969–1971	Later sixth to first half of eighth	14	54	388
	Lyminge	Kent, England	1953–1955	Fifth to mid sixth	16	11	68
	Half Mile Ride, Margate	Kent, England	1922–1923	Mid seventh to late seventh	No data	No data	No data
	Monkton	Kent, England	1971	Fifth to mid/late seventh	9	3	34
	Fingleham, Northbourne	Kent, England	1928–1929, 1959–1967	Fifth to late seventh	7	17	237
	Ozengell, Ramsgate	Kent, England	1850s, 1970s, 1980s	Fifth to late seventh	44	39	89
	Sarre	Kent, England	1863–1865, 1980s, 1990s	Fifth to first half of eighth	13	39	292
	Old Westgate Farm, Canterbury	Kent, England	1982	Seventh	50	1	2
	Darent Park	Kent, England	1972–1973, 1978, 1981, 1998	Fifth to end of sixth	7	1	13
	Mill Hill, Deal	Kent, England	1980s	Sixth	2	2	76
	Polhill, Dunton Green	Kent, England	1960s	Sixth to seventh	2	2	107
	Eastry, Updown	Kent, England	1976, 1989	Sixth to seventh	2	2	78
	Horton Kirkby	Kent, England	1930s	Fifth to seventh?	4	5	117
	Hoo Farm, Minster	Kent, England	1983	No data	100	3	3
	Thorne Farm, Minster	Kent, England	1984	Sixth to seventh	33	1	3
	Chalk Hill, Ramsgate	Kent, England	1992–1994	No data	100	1	1
Klevnäs (2013). Sites in England outside of Kent with reports of reopened burials.	Buttermarket, Ipswich	Suffolk, England	2000s	Seventh		1	
	Bloodmoor Hill, Carlton Coville	Suffolk, England	2000s	Seventh		4	
	Chadlington	Oxfordshire, England	1940s	Seventh to eighth		2	

Edix Hill, Barrington	Cambridgeshire, England	1990s	Fifth to seventh	4			
Melbourn	Cambridgeshire, England	1950s	Sixth to seventh	1			
Minerva, Alwalton	Cambridgeshire, England	1999	Sixth to seventh	3			
Nassington	Northamptonshire, England	1940s	Fifth to seventh	2			
Spong Hill	Norfolk, England	1970s	Fifth to sixth	1			
St Mary's Stadium, Southampton	Hampshire, England	2000s	Seventh to eighth	1			
Westfield Farm, Ely	Cambridgeshire, England	2000s	Seventh	1			
Winnall II	Hampshire, England	1960s	Seventh to eighth		At least 4		
Worthy Park, Kingsworthy	Hampshire, England	1960s	Fifth to seventh	2			
Zintl (2019)	Burgweinting-Kirchfeld Ost	Bavaria, Germany	2002, 2003	Second half of sixth	9	1	11
	Burgweinting-Nordwest II	Bavaria, Germany	2008, 2009	Second half of fifth to early sixth	33	5	15
	Burgweinting-Schule	Bavaria, Germany	2005, 2006	Early sixth to late seventh	93	53	57
	Burgweinting-Villa	Bavaria, Germany	1999–2001	Seventh to beginning of eighth	23	11	47
	Burgweinting-Ost	Bavaria, Germany	1986–1993	Late seventh to beginning of eighth	70	16	23
	Harting-Ost	Bavaria, Germany	1979–1981	Late sixth to late seventh	40	36	89
	Harting-Katzenbühl	Bavaria, Germany	1982–1985	Mid seventh to beginning of eighth	56	74	132
	Harting-Römerbad	Bavaria, Germany	1983–1985	Second half of seventh	60	6	10
	Geisling	Bavaria, Germany	1986–1991	Late sixth to beginning of eighth	69	110	152
	Obertraubling-Köstlmeierfeld	Bavaria, Germany	2000	Mid seventh to third quarter of seventh	100	1	1
	Thalmassing	Bavaria, Germany	1996	Late sixth/early seventh	100	1	1
van Haperen (2017)	Broechem	Antwerp, Belgium	2001–2003, 2007–2008	Fifth to seventh	24	104	431
	Bergeijk-Fazantlaan	North Brabant, Netherlands	1957, 1959	Late sixth to first half of eighth	24	28	117
	Dommelen	North Brabant, Netherlands	1980–1987	Late seventh to mid eighth	8	2	24
	Meerveldhoven	North Brabant, Netherlands	1955, 1975	Late sixth to seventh	16	9	54
	Borgharen-Pasestraat	Limburg, Netherlands	1995–1999, 2008–2009	Mid sixth to seventh	6	1	16
	Posterholt-Achterste Voorst	Limburg, Netherlands	1983–1984	Late sixth to first half of eighth	42	33	78
	Oegstgeest-Rhijngeest	Zuid-Holland, Netherlands	2004–2014	Sixth to seventh	12	1	8
	Lent-Lentseveld	Gelderland, Netherlands	2011	Fifth to sixth	10	5	50
	Wijchen-Centrum	Gelderland, Netherlands	1991–1992, 1996	Fifth to seventh	7	22	302

Noterman (2016)	Allonnes	Centre-Val de Loire, France	2012	Sixth to eighth	28	28	100
	Artzenheim	Grand Est, France	2013	Second half of sixth to late ninth	25	12	48
	Banneville-la-Campagne	Normandy, France	2009	Sixth to beginning of seventh	16	11	66
	Cutry	Grand Est, France	1973–1991	Late fifth to late seventh	21	57	271
	Didenheim	Grand Est, France	2008	Mid sixth to mid seventh	50	4	8
	Falaise	Normandy, France	2008–2009	Mid seventh to beginning of eighth	11	6	54
	Gaillon-sur-Montcient	Île-de-France, France	1994–1996	Fifth to eighth	20	46	231
	Goudelancourt-lès-Pierrepont	Hauts-de-France, France	1982–1987	First half of sixth to beginning of eighth	57	261	458
	Harfleur	Normandy, France	2011–2012	First half of sixth to seventh	8	54	650
	Houplin-Ancoisne	Hauts-de-France, France	2010	Late fifth to mid seventh	45	29	64
	Ichtratzheim	Grand Est, France	2011	Late sixth to late ninth	20	11	55
	Illfurth	Grand Est, France	2005, 2015	Late sixth to late eighth	49	100	204
	Kolbsheim	Grand Est, France	2010	First half of sixth to beginning of eighth	47	10	21
	Kuntzig	Grand Est, France	2007, 2009	Mid sixth to seventh	53	37	69
	Lagny-sur-Marne	Île-de-France, France	2010–2011	Late fourth/beginning of fifth to late eighth	5	16	287
	Longroy	Normandy, France	1998	Late fourth/beginning of fifth to late seventh	44	32	73
	Louviers	Normandy, France	2000–2005	Beginning of fifth to mid eighth	38	51	132
	Manerbe	Normandy, France	2005–2007	Sixth to seventh	5	6	113
	Marquette-Lez-Lille	Hauts-de-France, France	2005–2006	Mid fifth to eighth	45	61	134
	Matzenheim	Grand Est, France	2006	Beginning of sixth to late sixth	47	15	32
	Melun	Île-de-France, France	2010	Third to eighth	19	23	117
	Metzervisse	Grand Est, France	1995	Seventh to ninth	1	1	59
	Niedernai	Grand Est, France	1995	Fifth to sixth	37	12	32
	Noisy-le-Grand	Île-de-France, France	2008–2009	Sixth to seventh	12	26	219
	Odratzheim	Grand Est, France	2010	Late fifth to eighth	51	60	118
	Osthause	Grand Est, France	2006	Late sixth to mid seventh	80	12	15
	Quiéry-la-Motte	Hauts-de-France, France	2003–2009	Late fifth to late eighth	63	80	126
	Réguisheim	Grand Est, France	1997	Sixth	64	9	14

Rœschwoog	Grand Est, France	2010	Late sixth to late tenth	15	6	39
Saine-Fontaine	Hauts-de-France, France	1963–1984	Second half of fifth to eighth	35	287	823
Saint-Marcel	Grand Est, France	1999	Seventh	23	4	17
Saint-Parres-aux-Tertres	Grand Est, France	2005–2006	Sixth to seventh	11	9	83
Saint-Sauveur	Hauts-de-France, France	1986–1987	Second half of fifth to beginning of eighth	10	39	376
Saint-Vit	Bourgogne-Franche-Comté, France	1995–1999	Late sixth to beginning of seventh	52	98	189
Sissonne	Hauts-de-France, France	1985–2001	Mid sixth to late seventh	16	82	500
Vendenheim	Grand Est, France	2011	Beginning of sixth to late seventh	37	27	73
Versailles	Île-de-France, France	2007	Sixth	8	9	109
Vicq	Île-de-France, France	1976–1987	Second half of fifth to second half of seventh	27	580	2141
Villeneuve-d'Ascq	Hauts-de-France, France	2011	Fourth to sixth	20	2	10
Vitry-la-Ville	Grand Est, France	2013	Fifth to seventh/eighth	33	42	127
Vitry-sur-Orne	Grand Est, France	2010	Beginning of sixth to late seventh	49	62	125

## References

ASPÖCK, E. 2005. Graböffnungen im Frühmittelalter und das Beispiel der langobardenzeitlichen Gräber von Brunn am Gebirge, Flur Wolfholz, Niederösterreich. *Archaeologia Austriaca* 87: 225–65. <https://doi.org/10.1553/archaeologia87s225>

– 2011. Past “disturbances” of graves as a source: taphonomy and interpretation of reopened early medieval inhumation graves at Brunn am Gebirge (Austria) and Winnall II (England). *Oxford Journal of Archaeology* 30: 299–324. <https://doi.org/10.1111/j.1468-0092.2011.00370.x>

KLEVÄS, A. 2013. *Whodunnit? Grave robbery in Anglo-Saxon England and the Merovingian kingdoms*. Oxford: Archaeopress. <https://doi.org/10.30861/9781407312071>

NOTERMAN, A.A. 2016. Violation, pillage, profanation: la perturbation des sépultures mérovingiennes au haut Moyen Âge (VI<sup>e</sup>–VIII<sup>e</sup> siècle) dans la moitié nord de la France. Unpublished PhD dissertation, University of Poitiers.

VAN HAPEREN, M.C. 2017. In touch with the dead: early medieval grave reopenings in the Low Countries. Unpublished PhD dissertation, Leiden University.

ZINTL, S. 2019. Frühmittelalterliche Grabräuber? Wiedergeöffnete Gräber der Merowingerzeit (Regensburger Studien 24). Regensburg: Stadtarchiv Regensburg.