

Appendix 2 Details of AMS-radiocarbon dated samples (Update: 25-09-2006)

Lab nr	Age ± s	Sample name	Material / dated macrofossils
GrA-02544	6480 ± 50	Waal VP.4-7	Charcoal
GrA-04181	5000 ± 80	Barendrecht 4	2 <i>Alnus gl.</i> 1 <i>Alnus</i> bud
GrA-04182	5430 ± 90	Barendrecht 7	2 <i>Scirpus</i> , 2 <i>Carex</i> , 4 <i>Alnus gl.</i> 3 <i>Oenanthe</i>
GrA-04183	5810 ± 90	Barendrecht 10	2 <i>Scirpus</i> , 5 <i>Alnus</i> , 3 <i>Alisma pl. aq.</i>
GrA-04184	4830 ± 50	Vlaardingen 20A	seeds
GrA-04185	5220 ± 130	Vlaardingen 26A	seeds
GrA-04186	5780 ± 170	Vlaardingen 27A	seeds
GrA-04189	5900 ± 70	Vlaardingen 28A	seeds
GrA-04308	4470 ± 60	Barendrecht 1	2 Abscission, 2 <i>Urtica</i> , 1 Coleoptera
GrA-04315	1290 ± 50	Barendrecht 23	1 <i>Atriplex</i> , 1 <i>Alisma</i> , 1 <i>Alnus gl.</i> 3 <i>Polygonum</i> ,
GrA-05205	5430 ± 50	Vlaardingen 24A	seeds
GrA-05207	5930 ± 50	Barendrecht 13	1 <i>Cornus sang.</i>
GrA-05208	6660 ± 60	Barendrecht 22	2 <i>Cornus</i> , 2 <i>Solanum</i> 2 <i>Alnus gl.</i> 1 <i>Atriplex</i>
GrA-05210	5880 ± 50	Vlaardingen 30A	seeds
GrA-05211	4780 ± 50	Vlaardingen 19A	seeds
GrA-05212	5040 ± 50	Vlaardingen 21A	seeds
GrA-05214	5490 ± 80	Vlaardingen 27B	seeds
GrA-05215	6360 ± 50	Barendrecht 19	1 <i>Alnus</i> cone
GrA-05237	6200 ± 50	Barendrecht 16	3 <i>Alisma</i> , 2 <i>Typha</i> , 1 <i>Alnus</i> , 1 <i>Solanum</i>
GrA-05326	5550 ± 60	Barendrecht 27	2 <i>Carex</i> , 2 Bud scales
GrA-06511	5300 ± 60	Oud Alblas 3	1 <i>Alnus gl.</i> 26 <i>Urtica dioica</i> , 17 Bud scales, 3 <i>Lythrum salicaria</i> , 1 Bud
GrA-06512	5920 ± 60	Oud Alblas 5	1 <i>Alnus gl.</i> Pieces of <i>Cornus sanguinea</i> .
GrA-06513	6280 ± 60	Oud Alblas 8	1 <i>Cornus sanguinea</i> , 1 <i>Alnus gl.</i> cone, 1 <i>Carex riparia</i> , 1 <i>Solanum dulcamara</i>
GrA-06514	6090 ± 60	Oud Alblas 6	1 <i>Alisma plantago aquatica</i> , 1 Abscission layer, 12 <i>Carex cf acuta</i> , 4 <i>Frangula alnus</i>
GrA-06848	1010 ± 50	Bleskensgraaf B	seeds
GrA-07113	5770 ± 70	Oud Alblas 4	4 <i>Urtica dioica</i> , 3 <i>Cruciferae</i> sp., 1 <i>Rumex aquatica</i> , 1 <i>Frangula alnus</i>
GrA-07114	5730 ± 70	Barendrecht 10/B	1 <i>Alnus gl.</i> 1 <i>Typha</i> , 1 Bud, 1 <i>Atriplex</i> , 3 <i>Alisma</i>
GrA-07122	3490 ± 310	Oud Alblas 1	2 <i>Alnus</i> , 3 <i>Carex riparia</i>
GrA-07123	5090 ± 90	Oud Alblas 2	9 <i>Urtica</i> , 1 <i>Carex</i> sp.
GrA-07124	3720 ± 70	Oud Alblas 9	3 <i>Solanum dulcamara</i> , 1 <i>Carex riparia</i> , 5 <i>Carex acuta</i> , 3 <i>Carex rostrata</i> .
GrA-07125	4500 ± 80	Oud Alblas 10	3 <i>Carex riparia</i> , 1 <i>Carex rostrata</i>
GrA-07126	5830 ± 100	Barendrecht 10/O	1 Bud, 5 Bud scales, 2 <i>Alisma</i> , 5 <i>Urtica</i>
GrA-07128	6120 ± 80	Oud Alblas 7	37 <i>Urtica dioica</i> , 1 <i>Solanum dulcamara</i> , 2 <i>Alnus glutinosa</i> 1 <i>Carex</i> sp.
GrA-07129	5010 ± 70	Barendrecht 4/B	1 Bud, 3 Bud scales, 1 <i>Atriplex</i> , 6 Abscission
GrA-07134	5050 ± 90	Barendrecht 4/O	4 <i>Urtica</i> , 14 Bud scales, 1 Abscission
GrA-10921	10640 ± 80	Giessendam ICG-9	Salix twigs with bud scales in base of WM
GrA-11301	6090 ± 50	Zevenbergschen Hoek 21N	Charcoal
GrA-11302	6550 ± 50	Lage Zwaluwe	Charcoal
GrA-11303	5110 ± 50	Zevenbergschen Hoek 22	Charcoal
GrA-11304	4290 ± 50	Zevenbergschen Hoek 21Z	Charcoal
GrA-11306	4890 ± 50	Zevenbergschen Hoek 22	Charcoal
GrA-13683	3380 ± 40	Barendrecht 24	8 <i>Carex acuta</i> nuts, 4 <i>Rubus fruticosus</i> endocarp, 2 Buds, 96 Bud scales, 7 Abscission layers
GrA-13685	3790 ± 40	Barendrecht 26	3 <i>Alnus glutinosa</i> nuts, 3 <i>Carex</i> sp. nuts, 1 <i>Rubus fruticosus</i> endocarp, 65 Bud scales, 33 Abscission layers
UtC-01125	4460 ± 70	Achterdijk I-1a	Gyttja
UtC-01126	4470 ± 70	Achterdijk I-1b	1 <i>Nuphar lutea</i> seed
UtC-01127	4500 ± 140	Achterdijk I-1c	4 <i>Potamogeton</i> sp. fruits
UtC-01128	4670 ± 80	Giessenburg I-1a	<i>Phragmites</i> peat
UtC-01129	4670 ± 130	Giessenburg I-1b	9 <i>Humulus lupulus</i> fruits
UtC-01130	4500 ± 80	Giessenburg I-1c	Fragment of <i>Alnus glutinosa</i> cone
UtC-01131	3170 ± 80	Oosterwijk II-1a	Slightly clayey <i>Alnus</i> peat
UtC-01132	3250 ± 70	Oosterwijk II-1b	7 <i>Oenanthe aquatica</i> mericarps
UtC-01133	3310 ± 80	Oosterwijk III-1a	<i>Alnus</i> peat
UtC-01134	3250 ± 70	Oosterwijk III-1b	1 <i>Sparganium erectum</i> fruit

UtC-01135	3070 ± 90	Oosterwijk III-1c	6 <i>Oenanthe aquatica</i> mericarps
UtC-01136	5110 ± 90	Oosterwijk III-2a	Strongly clayey <i>Phragmites</i> peat
UtC-01137	5240 ± 90	Oosterwijk III-2b	3 <i>Scirpus lacustris</i> nuts
UtC-01138	3160 ± 90	Oosterwijk IV-1a	<i>Alnus</i> peat
UtC-01139	3190 ± 120	Oosterwijk IV-1b	3 <i>Alnus glutinosa</i> nuts
UtC-01140	3080 ± 90	Oosterwijk IV-1c	Fragment of <i>Alnus glutinosa</i> cone
UtC-01141	4580 ± 110	Schelluinen I-1a	Strongly clayey <i>Alnus</i> peat
UtC-01142	4740 ± 160	Schelluinen I-1b	20 <i>Alisma plantago-aquatica</i> fruits
UtC-01143	5490 ± 100	Schelluinen I-2a	Strongly clayey gyttja
UtC-01144	5100 ± 110	Schelluinen I-2b	2 <i>Scirpus lacustris</i> nuts
UtC-01184	20100 ± 300	Ochten-M1	Sandy clay with seeds, small sample; disturbed
UtC-01185	1000 ± 500	Ochten-M2	Sandy clay with seeds, small sample; disturbed
UtC-01186	140 pmc	Ochten-M3	Sandy clay with seeds, small sample; disturbed
UtC-01187	3400 ± 300	Ochten-M10	Sandy clay with seeds, small sample
UtC-01188	4860 ± 190	Ochten-M13	Clay with seeds, small sample
UtC-01189	4360 ± 160	Ochten-M14	Clay with seeds, small sample
UtC-01190	4914 ± 160	Ochten-M15	Clay with seeds, small sample
UtC-01191	5260 ± 160	Ochten-M16	Clay with seeds, small sample
UtC-01192	5890 ± 200	Ochten-M17	Clay with seeds, small sample
UtC-01235	6060 ± 190	Ochten-M18	Clay with seeds, small sample
UtC-01294	5320 ± 60	Oosterwijk II-2a	Strongly clayey <i>Phragmites</i> peat
UtC-01295	5090 ± 50	Oosterwijk IV-2a	<i>Phragmites</i> peat
UtC-01296	4940 ± 70	Oosterwijk IV-2b	<i>Phragmites</i> peat (roots removed)
UtC-01297	5440 ± 50	Bazeldijk I-2a	Strongly clayey <i>Phragmites</i> peat
UtC-01298	4570 ± 120	Oosterwijk I-1a	Gyttja
UtC-01299	5300 ± 70	Oosterwijk III-2c	3 <i>Scirpus lacustris</i> nuts
UtC-01300	4980 ± 130	Schelluinen I-2c	2 <i>Scirpus lacustris</i> nuts
UtC-01396	5330 ± 70	Bazeldijk I-2c	Fragments of Coleoptera
UtC-01397	5240 ± 70	Bazeldijk I-2b	2 <i>Scirpus lacustris</i> nuts
UtC-01405	3970 ± 60	Oosterwijk I-1b	2 <i>Nymphaea alba</i> seeds
UtC-01406	4030 ± 30	Oosterwijk I-1c	1 <i>Euphorbia palustris</i> seed
UtC-01407	5230 ± 50	Oosterwijk II-2b	Fragments of Coleoptera and various terrestrial botanical macrofossils <sup>3</sup>
UtC-01408	4990 ± 70	Oosterwijk IV-2c	Fragments of Coleoptera and various terrestrial botanical macrofossils <sup>3</sup>
UtC-01409	4240 ± 50	Achterdijk I-1d	Various terrestrial. botanical macrofossils
UtC-01410	3630 ± 40	Bazeldijk I-1b	1 <i>Sparganium erectum</i>
UtC-01425	2150 ± 40	Lingebos I-1b	Strongly clayey <i>Alnus</i> peat, living roots removed
UtC-01426	1880 ± 30	Lingebos I-1c	10 <i>Oenanthe aquatica</i> mericarps
UtC-01427	1920 ± 70	Lingebos I-1d	Fragments of cf. <i>Alnus</i> wood
UtC-01479	3380 ± 60	Bazeldijk I-1a	<i>Alnus</i> peat
UtC-01480	1900 ± 50	Lingebos I-1a	Strongly clayey <i>Alnus</i> peat
UtC-01481	2290 ± 60	Linge III-1a	Strongly clayey <i>Alnus</i> peat
UtC-01482	2210 ± 40	Linge III-1b	Fragment of cf. <i>Alnus</i> wood
UtC-01556	5620 ± 50	Dalem I-1a	Slightly clayey <i>Phragmites</i> peat
UtC-01557	5360 ± 50	Dalem I-1b	10 <i>Carex</i> sp. nuts
UtC-01604	1760 ± 50	Velddriel	Twig of <i>Alnus</i> wood
UtC-01717	2160 ± 60	Linge I-1	20 <i>Alisma plantago-aquatica</i> fruits
UtC-01718	2010 ± 40	Linge II-1	27 <i>Alisma plantago-aquatica</i> fruits, 1 <i>Carex</i> sp. nut
UtC-01891	2510 ± 50	Lingebos II-1	Fragments of cf. <i>Oenanthe</i> mericarps
UtC-01892	4310 ± 90	Alendorp I-1	3 <i>Scirpus lacustris</i> nuts
UtC-01893	3960 ± 60	Blokland I-1	3 <i>Sparganium</i> sp. fruits
UtC-01894	5800 ± 70	Benschop I-1	13 <i>Alnus glutinosa</i> nuts
UtC-01895	5590 ± 70	Dalem IV-1	3 cf. <i>Oenanthe</i> mericarps, 3 <i>Carex</i> sp. nuts
UtC-01896	2810 ± 190	Dalem II-2	1 <i>Sparganium</i> sp. fruit
UtC-01897	5610 ± 60	Benschop II-1	2 <i>Sparganium</i> sp. fruit
UtC-01898	4200 ± 60	Nedereind I-1	7 <i>Carex</i> sp. nuts
UtC-01899	1600 ± 50	Dalem II-1	Fragment of cf. <i>Salix</i> wood in top of thin peat layer
UtC-01900	2650 ± 50	Oud-Zuilen I-1a	Fragments of <i>Alnus glutinosa</i> wood

UtC-01901	2620 ± 50	Oud-Zuilen I-1b	Fragments of cf. <i>Alnus</i> wood
UtC-02607	3290 ± 70	Homoet I/1	2 <i>Sparganium</i> sp. fruits
UtC-03596	2600 ± 140	Oosterwijk III-3	10 <i>Alnus glutinosa</i> nuts
UtC-03597	2580 ± 60	Oosterwijk I-3	1 <i>Alnus glutinosa</i> cone
UtC-03617	2220 ± 100	Oosterwijk I-2	22 <i>Alisma plantago Aquatica</i> fruits
UtC-03626	890 ± 40	Alm II	2 <i>Rumex</i> congl. fruits
UtC-03944	4200 ± 260	Zandberg I-1	5 <i>Alisma plantago-aquatica</i> fruits
UtC-03945	4850 ± 40	Zandberg II-1	2 <i>Carex</i> sp.nuts
UtC-03946	5220 ± 70	Zandberg III-1	1 <i>Carex rostrata</i> nut, 1 <i>Carex</i> sp. nut, 1 <i>Solanum dulcamara</i> seed
UtC-03947	5660 ± 80	Zandberg V-1	17 <i>Ranunculus sceleratus</i> fruits
UtC-03948	5880 ± 260	Zandberg VI-1	14 <i>Alnus glutinosa</i> nuts
UtC-04164	5660 ± 60	Zandberg VI-2	35 <i>Alnus glutinosa</i> nuts
UtC-04637	2410 ± 60	Buren	8 <i>Eocharis palustris</i>
UtC-04638	2420 ± 140	Erichem	1 <i>Atriplex</i> , 1 <i>Nymphaea</i> , 2 <i>Urtica</i> , 40 Junaceae
UtC-04639	1901 ± 35	Schoonrewoerdse 1	5 <i>Scirpus</i> (Slightly humic clay)
UtC-04640	2770 ± 90	Schoonrewoerdse 3	10 <i>Rumex marit</i> fr. (Humic clay / peaty clay)
UtC-04641	4640 ± 60	Schoonrewoerdse 5d	6 <i>Carex</i> , 33 <i>Typha</i> , 4 <i>Alisma</i> (Humic clay)
UtC-04642	2975 ± 35	Schoonrewoerdse 6	5 <i>Oenanthe</i> , 4 <i>Alisma</i> , 2 <i>Mentha</i> , 1 <i>Scirpus</i> , 1 <i>Carex</i> rostr. (Humic clay / peaty clay)
UtC-04643	3818 ± 42	Schoonrewoerdse 7	4 <i>Scirpus</i> , 1 <i>Solanum</i> (Humic clay)
UtC-04644	5170 ± 110	Schoonrewoerdse 8	1 <i>Typha</i> , 3 <i>Urtica</i> , 8 <i>Alisma</i> (Peaty clay)
UtC-04645	6220 ± 70	Schoonrewoerdse 9	4 <i>Alnus glutinosa</i> , 2 <i>Oenanthe aquatica</i> (Peaty clay)
UtC-04646	6150 ± 50	Schoonrewoerdse 10	Wood and root fragments, in clay; reworked
UtC-04647	3823 ± 40	Schoonrewoerdse 12	1 <i>Alnus glut.</i> Cone (Slightly humic clay)
UtC-04648	5120 ± 70	Schoonrewoerdse 14	2 <i>Cornus sanguinea endocarp</i> (Clayey peat)
UtC-04649	4180 ± 50	Schoonrewoerdse 15	Piece of <i>Alnus</i> wood; reworked
UtC-06713	2514 ± 38	Hagestein	8 <i>Oenanthe aquatica</i> , 8 <i>Alnus glutinosa</i> , 1 <i>Solanum dulcamara</i> , 4 <i>Ranunculus</i> , 2 <i>Urtica dioica</i> , 1 <i>Alnus</i> cone (Peat)
UtC-06714	6260 ± 60	Tienhoven-III	63 <i>Alisma</i> , 9 <i>Carex acuta</i> , 24 <i>Carex</i> sp., 2 <i>Typha</i> , 2 <i>Hypericum</i>
UtC-06715	6110 ± 50	Tienhoven-I	5 <i>Alnus</i> , 4 <i>Carex</i> sp., 4 <i>Alisma</i> , 4 <i>Typha</i> , 3 <i>Ranunculus</i> , 1 <i>Hypericum</i> (Peat)
UtC-06716	2936 ± 37	Bommel	22 <i>Carex rostrata</i> , 15 <i>Carex acuta</i> , 12 <i>Alisma plantago-aquatica</i> , 3 <i>Typha</i> , 1 <i>Oenanthe aquatica</i> (Peat)
UtC-06717	4250 ± 70	Buren	90 <i>Ranunculus sceleratus</i> , 5 <i>Alnus</i> (Peat)
UtC-06724	3730 ± 80	Hoon	1 <i>Oenanthe aquatica</i> , 1 <i>Alisma</i> , 1 <i>Scirpus</i> , 1 <i>Alnus</i> , 8 <i>Carex acuta</i> , 1 <i>Ranunculus lingua</i> (Peat)
UtC-06725	8130 ± 80	Hattelaar	11 <i>Oenanthe aquatica</i> , 6 <i>Potentilla</i> , 4 <i>Alisma</i> , 1 <i>Typha</i> (Peat)
UtC-06726	2590 ± 100	Esther-I	37 <i>Alisma plantago-aquatica</i> , 2 <i>Carex</i> sp., 1 <i>Lemnaminor</i> (Peat)
UtC-06727	3080 ± 60	Esther-V	13 <i>Carex rostrata</i> , 10 <i>Alisma plantago-aquatica</i> , 1 <i>Oenanthe aquatica</i> , 1 <i>Typha</i> (Peat)
UtC-06745	2480 ± 60	Esther-IV 247	2 <i>Carex</i> sp., 2 <i>Ranunculus</i> sp.1 <i>Mentha</i> , 2 <i>Atriplex</i> , 1 leaf fragment, 1 <i>Scirpus</i> , 2 <i>Potentilla</i> , 1 <i>Juncus</i> , 1 <i>Alisma plantago-aquatica</i> , 1 <i>Stellaria</i> (Humic clay)
UtC-06842	1090 ± 38	97Malvoo-4243	Terrestrial seeds
UtC-06845	2688 ± 37	Blokhoven 243	8 <i>Alisma plantago-aquatica</i> , 11 <i>Mentha</i> , 2 leaf fragments, 12 <i>Carex</i> sp., 1 <i>Carex rostrata</i> , 1 <i>Rumex</i> sp., 2 <i>Potentilla</i> (Peat)
UtC-06846	4376 ± 37	Zoelen 244	9 <i>Alnus glutinosa</i> , 2 <i>Oenanthe</i> (Peat)
UtC-06847	1842 ± 42	Avezaath 245	4 <i>Carex</i> sp., 3 <i>Polygonum</i> sp., 3 <i>Oenanthe aquatica</i> , 1 <i>Alisma</i> , 1 <i>Eupatorium cannabinum</i> (Humic clay)
UtC-06848	3124 ± 38	Esther-II 246	5 <i>Typha</i> , 3 <i>Scirpus</i> , 2 <i>Ranunculus</i> sp., 1 <i>Carex</i> sp., leaf fr. (Peat)
UtC-06849	2071 ± 44	Rijswijk 248	11 <i>Alnus glutinosa</i> , 5 <i>Scirpus</i> , 4 <i>Alisma plantago-aquatica</i> , 3 <i>Oenanthe aquatica</i> , 2 <i>Polygonum</i> (Peat)
UtC-06850	2258 ± 33	Werken 249	47 leaf fr., 4 <i>Alnus glutinosa</i> , 2 <i>Carex</i> sp., 2 <i>Alisma plantago-aquatica</i> (Peat)
UtC-06851	1983 ± 36	Alm 250	7 <i>Alnus glutinosa</i> , <i>Urtica dioica</i> , 5 <i>Ranunculus</i> sp., 3 <i>Carex rostrata</i> , 1 <i>Carex</i> sp., 1 <i>Lycopus europaeus</i> , 1 <i>Alisma plantago-aquatica</i> , 1 <i>Mentha</i> (Peat)
UtC-06893	8390 ± 70	Beugen BEU 4-28	<i>Betula</i> and <i>Carex</i> seeds
UtC-06948	3103 ± 34	Heldamer 256	26 <i>Carex rostrata</i> , 33 <i>Typha</i> , 14 <i>Mentha aquatica</i> , 1 <i>Oenanthe aquatica</i> , 1 <i>Alisma plantago aquatica</i> (Top of <i>Alnus</i> peat overlying <i>Phragmites</i> peat and gytja)
UtC-06949	4873 ± 38	Honswijk 252	62 <i>Scirpus</i> fragments (Peat)
UtC-06950	5111 ± 41	Delwijnen II 257	26 <i>Carex rostrata</i> (Peat overlying PERDS)
UtC-06951	524 ± 36	Delwijnen V 260	4 Abscission layers, 4 Bud scales, 6 Coleoptera (Peat overlying PERDS)
UtC-06952	5821 ± 42	Den Duyl II 262	5 <i>Polygonum</i> , 5 <i>Alnus glutinosa</i> , 3 <i>Carex</i> sp., 2 <i>Alisma plantago aquatica</i> , 5 leaf fragments, 19 Abscission layers (Peat overlying PERDS)
UtC-06953	5874 ± 40	Den Duyl III 263	2 <i>Alnus glutinosa</i> , 1 <i>Oenanthe aquatica</i> , 1 <i>Carex</i> sp., 1 <i>Ranunculus</i> sp., 5 leaf fragments, 2 Bud scales, 21 Abscission layers (Peat overlying PERDS)
UtC-06975	3830 ± 90	Heldamer 255	5 <i>Sagittaria sagittifolia</i> , 2 <i>Oenanthe aquatica</i> , 2 <i>Carex</i> sp., 2 <i>Potentilla</i> , 1 <i>Ranunculus scleratus</i> ( <i>Phragmites</i> peat)
UtC-06976	2820 ± 90	Werken-II 254	1 <i>Alisma plantago-aquatica</i> , 2 <i>Urtica dioica</i> , 1 Abscissionlayer, 28 Coleoptera (Peat)
UtC-06977	5430 ± 90	Tienhoven-II 253	1 <i>Carex rostrata</i> , 2 <i>Urtica dioica</i> , 2 Abscission layers (Peat)

UtC-06978	1930 ± 60	Heldam 251	5 <i>Carex</i> sp., 3 <i>Oenanthe aquatica</i> , 4 <i>Alisma plantago-aquatica</i> , 2 <i>Scirpus</i> , 1 <i>Ranunculus sceleratus</i> , 1 <i>Typha</i> , 1 <i>Lycopus europaeus</i> , 2 <i>Urtica dioica</i> (Peaty clay)
UtC-06979	3920 ± 100	Delwijnen III 258	3 <i>Carex</i> sp., 2 <i>Typha</i> , 1 <i>Rubus fruticosus</i> , 1 <i>Urtica dioica</i> , 4 Coleoptera (Peat overlying PERDS)
UtC-06980	3380 ± 120	Delwijnen IV 259	7 Abscission layers, 1 <i>Ranunculus</i> sp., 1 Coleoptera (Peat overlying PERDS)
UtC-06981	6150 ± 120	Den Duyl I 261	3 Abscission layers, 1 <i>Typha</i> , 5 Coleoptera (Peat overlying PERDS)
UtC-07803	2220 ± 110	Dussen-Voogdwerf I-265	1 <i>Carex</i> sp. fragment, 2 <i>Ranunculus sceleratus</i> , 15 Coleoptera
UtC-07804	4588 ± 48	Dussen-Oude Straat II-268	1 <i>Carex riparia</i> , 2 <i>Carex</i> sp., 1 <i>Mentha</i> , leaf fragments
UtC-07805	7930 ± 60	Leeuwensche Veld I-269	3 <i>Carex</i> sp. 1 <i>Oenanthe</i> , 1 <i>Lycopus europaeus</i>
UtC-07806	4250 ± 60	Doornenburg 281	14 <i>Scirpus</i> , 1 <i>Typha</i> , 1 <i>Betula</i> (peat underlying vegetation horizon)
UtC-07807	3020 ± 60	Macharen 271	2 Bud scales, 1 <i>Ranunculus sceleratus</i> , leaf fragments
UtC-07808	3680 ± 60	Het Wild 272	12 <i>Alnus glutinosa</i> , 3 leaf fragments
UtC-07809	2914 ± 42	Slijk-Ewijk-Vogelenzang 279	4 <i>Potentilla</i> , 2 <i>Eupatorium cannabinum</i> , 1 <i>Oenanthe</i> fragment, 1 <i>Scirpus</i> , 1 leaf remains, 1 <i>Ranunculus</i> sp. (Peaty clay)
UtC-07810	2260 ± 60	Valburg-Eimersche Pijp 278	5 <i>Carex</i> sp., 4 <i>Alisma</i> , 2 <i>Potentilla</i> , 1 <i>Hypericum</i> , 1 <i>Ranunculus</i> sp., 1 <i>Scirpus</i> (peaty clay)
UtC-07811	3664 ± 44	De Meern-Nieuwveld II-273	4 <i>Oenanthe</i> , 9 <i>Sagittaria sagittifolia</i> , 1 <i>Alisma</i> , 2 <i>Ranunculus sceleratus</i> (calcareous gyttja)
UtC-07812	5788 ± 50	Deil I-276	20 <i>Scirpus lacustris</i> , 1 <i>Oenanthe</i> (peat)
UtC-07813	2990 ± 48	Elsterveldse Zeeg 280	3 <i>Betula</i> , 1 <i>Alnus glutinosa</i> , leaf remains
UtC-07864	1130 ± 100	Dussen-Voogdwerf II-266	5 <i>Oenanthe</i> , 4 <i>Rumex conglomeratus</i> , 1 <i>Lycopus europaeus</i> , 1 <i>Carex</i> sp. Fragment, 1 <i>Juncus effusus</i> , 1 <i>Ranunculus sceleratus</i> , 1 <i>Sagittaria sagittifolia</i> , 1 <i>Alisma</i> , 1 leaf fragment
UtC-07865	2980 ± 100	Dussen-Oude Straat I-267	20 <i>Alnus glutinosa</i> , 6 <i>Alisma</i> , 1 <i>Carex rostrata</i> , 2 <i>Carex</i> sp. Fragments, 1 <i>Urtica dioica</i>
UtC-07866	6870 ± 130	Haren 270	2 Buds, 24 Bud scales, 1 <i>Carex acuta</i> , 1 <i>Carex</i> sp., 4 leaf fragments
UtC-07867	5360 ± 120	Deil II-277	6 <i>Alnus glutinosa</i> , 3 <i>Carex</i> sp., 3 <i>Alisma</i> , 1 <i>Oenanthe</i> , 7 leaf fragments (peat)
UtC-08084	4360 ± 90	Buren II-290	8 <i>Urtica dioica</i> fruits, 5 <i>Carex</i> sp nuts, 2 <i>Ranunculus scleratus</i> fruits, 1 <i>Mentha aquatica mericarp</i> , 15 Bud scales (Peaty clay)
UtC-08120	3441 ± 41	't Tolhuis 289	28 <i>Solanum dulcamara</i> seeds, 1 <i>Oenanthe aquatica mericarp</i> , 4 <i>Carex</i> sp nuts, 2 <i>Alisma plantago aquatica</i> fruits (Peaty clay)
UtC-08121	3020 ± 40	De Zijvond 288	5 <i>Alnus glutinosa</i> cones, 63 <i>Alnus glutinosa</i> nuts (Clayey peat)
UtC-08122	3303 ± 39	Haren II-287	Leaf remains, 3 Bud scales, 1 <i>Oenanthe aquatica mericarp</i> , 1 <i>Rumex</i> sp fruit (Humic clay/gyttja)
UtC-08123	2934 ± 42	Hoogekamp 286	3 <i>Solanum dulcamara</i> seeds, 1 <i>Rumex</i> sp fruit, 3 <i>Carex</i> sp nuts, 4 <i>Oenanthe aquatica</i> mericarps, 2 <i>Alisma plantago aquatica</i> fruits, leaf remains (Clayey peat)
UtC-08124	4504 ± 41	Kessel I-284	3 <i>Carex</i> sp nuts, 3 <i>Polygonum</i> sp fruits, 3 <i>Atriplex</i> sp nuts, 2 <i>Oenanthe aquatica</i> maricarps, 1 <i>Sagittaria sagittifolia</i> fruit, 2 <i>Lychnis flos-cuculi</i> seeds, 1 Bud scale, 3 <i>Ranunculus</i> sp fruits (Humic clay/gyttja)
UtC-08125	2734 ± 44	Kessel II-285	11 <i>Typha</i> fruits, 35 <i>Alisma plantago aquatica</i> fruits, 17 <i>Carex</i> sp nuts, 2 <i>Oenanthe aquatica</i> maricarps, 7 <i>Mentha aquatica</i> maricarps, 1 <i>Solanum dulcamara</i> seed, 2 <i>Sagittaria sagittifolia</i> fruits, 1 <i>Juncus</i> sp seed, 1 <i>Alnus glutinosa</i> nut (peaty clay)
UtC-08170	2378 ± 35	Bemmel 283	6 <i>Oenanthe aquatica</i> maricarps, 3 <i>Sagittaria sagittifolia</i> fruits, 3 <i>Alisma plantago aquatica</i> fruits, 3 <i>Urtica dioica</i> fruits, 15 <i>Potentilla</i> sp. Seeds, 2 <i>Scirpus</i> sp. Nuts, 2 <i>Lychnis flos-cuculi</i> seeds, 1 <i>Atriplex</i> sp. nut, 5 <i>Ranunculus</i> sp. fruits, 3 <i>Juncus</i> sp. seeds, 1 <i>Ranunculus scleratus</i> fruit, 1 <i>Carex</i> sp. Nut (Humic clay/gyttja)
UtC-08171	5428 ± 40	Herwijnen I-274	Leaf remains, 7 <i>Alisma plantago aquatica</i> fruits, 1 <i>Sagittaria sagittifolia</i> fruit, 2 <i>Oenanthe aquatica</i> maricarps, 1 <i>Carex</i> sp. nut, 9 <i>Alnus glutinosa</i> nuts, 1 <i>Alnus glutinosa</i> cone, (peat, underlying coarse gyttja)
UtC-08182	3200 ± 38	Herwijnen II-275	1 <i>Alnus glutinosa</i> cone, 9 <i>Alnus glutinosa</i> nuts, 4 <i>Oenanthe aquatica</i> maricarps, 1 <i>Carex</i> sp. nut (peat)
UtC-09136	5120 ± 120	Bruin-2	27 <i>Urtica dioica</i> fruits, 1 <i>Carex acuta</i> nut (peat)
UtC-09137	5770 ± 130	Bruin-4	2 <i>Alisma plantago aquatica</i> fruits, 16 Bud scales (peat)
UtC-09138	5700 ± 80	Polderweg (Giessendam ICG-1)	2 <i>Alnus glutinosa</i> nuts, 14 <i>Urtica dioica</i> fruits, 1 <i>Alisma plantago aquatica</i> fruit, 5 Bud scales, 1 leaf fragment, 2 Abscission layers (peat)
UtC-09173	5590 ± 50	Bruin-1	5 <i>Alnus glutinosa</i> nuts, 1 <i>Scirpus lacustris</i> nut, 2 <i>Polygonum</i> nuts, 1 <i>Atriplex</i> nut, 1 <i>Carex</i> sp. nut, 8 <i>Urtica dioica</i> fruits, 3 Buds, 30 Bud scales (peat)
UtC-09174	6461 ± 43	Bruin-5	4 <i>Solanum dulcamara</i> seeds, 7 <i>Urtica dioica</i> fruits, 1 <i>Carex acuta</i> nut, 1 <i>Scirpus lacustris</i> nut, 1 <i>Typha</i> fruit, 1 <i>Alisma plantago aquatica</i> fruit, 47 Bud scales, 1 Bud, 1 leaf fragment (peat)
UtC-09175	6011 ± 49	Polderweg (Giessendam ICG-2)	1 <i>Oenanthe aquatica</i> mericarp, 1 <i>Carex</i> sp. fruit, 1 <i>Typha</i> fruit, 1 Bud, 46 Bud scales (peat)
UtC-09176	6065 ± 46	Polderweg (Giessendam ICG-3)	3 <i>Urtica dioica</i> fruits, 5 Buds, 105 Bud scales (peat)
UtC-09177	6679 ± 48	Polderweg (Giessendam ICG-6)	1 <i>Alnus glutinosa</i> cone, 8 <i>Alnus glutinosa</i> nuts, 9 <i>Scirpus lacustris</i> nuts, 1 <i>Oenanthe aquatica</i> mericarp, 2 Buds, 80 Bud scales (peat)
UtC-09178	6220 ± 50	Polderweg (Giessendam ICG-7)	9 <i>Solanum dulcamara</i> seeds, 1 <i>Carex rostrata</i> nut, 2 <i>Carex</i> sp. nuts, 2 <i>Atriplex</i> nuts, 3 <i>Scirpus lacustris</i> nuts, 2 <i>Stellaria</i> seeds, 150 <i>Urtica dioica</i> fruits, 12 Bud scales (peat)
UtC-09261	6737 ± 48	Polderweg (Giessendam ICG-10)	9 <i>Alnus glutinosa</i> nuts, 1 <i>Solanum dulcamara</i> seed, 1 <i>Carex rostrata</i> nut, 2 <i>Carex</i> sp. nuts, 60 Bud scales (peat)
UtC-09540	8670 ± 60	Landwehr-1	3 Bud scales, 6 Leaf remains, 4 <i>Scirpus lacustris</i> nuts, 1 <i>Carex rostrata</i> nut, 3 <i>Carex</i> sp. Nuts, 1 <i>Sagittaria sagittifolia</i> fruit (peat)
UtC-09541	5734 ± 43	Landwehr-2	9 <i>Scirpus lacustris</i> nuts, 2 <i>Carex rostrata</i> nuts, 3 <i>Carex</i> sp. Nuts, 1 <i>Alisma plantago aquatica</i> fruit, 1 <i>Rumex</i> fruit, 1 <i>Oenanthe aquatica</i> mericarp, 1 Leaf remains (peat)
UtC-09542	7020 ± 50	Landwehr-3	5 Bud scales, 1 <i>Carex rostrata</i> nut, 1 <i>Alnus glutinosa</i> nut, 1 <i>Carex</i> sp. utriculus (peat)
UtC-10014	6140 ± 50	De Woerd 08	1 <i>Solanum dulcamara</i> seed, 7 <i>Alisma plantago aquatica</i> fruits, 4 <i>Urtica dioica</i> fruits, 3 <i>Oenanthe aquatica</i> mericarps, 4 <i>Alnus glutinosa</i> nuts, 1 <i>Scirpus lacustris</i> nut, 3 Leaf remains
UtC-10015	6180 ± 47	De Woerd 06	6 <i>Carex rostrata</i> nuts, 7 <i>Carex rostrata</i> fragments, 5 <i>Carex rostrata</i> utriculus

UtC-10016	5138 ± 44	De Woerd 01	29 Bud scales, 2 Buds, 10 Leaf remains, 2 <i>Alnus glutinosa</i> nuts, 1 <i>Carex rostrata</i> nut (incl. utriculus)
UtC-10017	5771 ± 41	De Woerd 02	105 Bud scales, 2 Buds, 1 <i>Alnus glutinosa</i> nut, 1 <i>Scirpus lacustris</i> nut, 2 <i>Urtica dioica</i> fruits
UtC-10018	5860 ± 50	De Woerd 03	2 <i>Carex rostrata</i> nuts, 1 <i>Carex acuta</i> nut, 1 <i>Carex</i> sp. nut, 25 Bud scales, 4 Leaf remains
UtC-10019	6106 ± 48	De Woerd 04	19 <i>Carex rostrata</i> nuts, Bud scales
UtC-10020	5440 ± 90	De Woerd 05	1 <i>Alnus glutinosa</i> nut, 22 Bud scales, 2 Buds
UtC-10021	5654 ± 44	De Treeft 01	6 <i>Alnus glutinosa</i> nuts, 4 <i>Urtica dioica</i> fruits, 1 <i>Solanum dulcamara</i> seed, 3 Leaf remains, 98 Bud scales, 4 Buds
UtC-10022	5059 ± 42	De Treeft 02	3 <i>Alnus glutinosa</i> nuts, 1 <i>Alisma plantago aquatica</i> fruit, 1 <i>Typha</i> fruit, 1 <i>Lycopus europaeus</i> mericarp, 2 Buds, 91 Bud scales
UtC-10023	4797 ± 47	De Treeft 03	16 <i>Alnus glutinosa</i> nuts, 2 <i>Alisma plantago aquatica</i> fruit, 1 <i>Typha</i> fruit, 4 <i>Urtica dioica</i> fruits, 1 <i>Carex riparia</i> nut, 1 <i>Oenanthe aquatica</i> mericarp, 1 Buds, 11 Bud scales, 4 Leaf remains
UtC-10024	6153 ± 42	De Treeft 04	2 <i>Alnus glutinosa</i> cones, 11 <i>Alnus glutinosa</i> nuts, 10 Bud scales
UtC-10025	5213 ± 45	De Treeft 05	2 <i>Solanum dulcamara</i> seeds, 4 <i>Alisma plantago aquatica</i> fruits, 1 <i>Oenanthe aquatica</i> mericarp, 39 Bud scales
UtC-10182	8140 ± 60	Dreumel 01	7 Bud scales, 3 Buds, 2 <i>Oenanthe aquatica</i> mericarps, 2 <i>Scirpus lacustris</i> nuts, 1 <i>Rubus fruticosus</i> endocarps, 1 <i>Alisma plantago aquatica</i> fruit; from clayey peat
UtC-10183	6980 ± 50	Dreumel 02	1 <i>Alnus glutinosa</i> cone, 6 Bud scales; from clayey peat
UtC-10184	3099 ± 43	Dreumel 03	1 <i>Alnus glutinosa</i> cone, 9 <i>Alnus glutinosa</i> nuts, 75 Bud scales, 2 Buds, 30 Leaf remains; from clayey peat
UtC-10185	3247 ± 40	Dreumel 04	2 <i>Alnus glutinosa</i> cones, 5 <i>Alnus glutinosa</i> nuts; from sandy peat
UtC-10186	4800 ± 50	Dreumel 05	10 Buds, 290 Bud scales, Leaf remains; from humic clay
UtC-10187	7170 ± 60	Dreumel 06	19 <i>Oenanthe aquatica</i> mericarps, 2 Buds, 35 Bud scales; from clayey peat
UtC-10188	5068 ± 48	Maren 02	36 <i>Carex rostrata</i> , fragments & nuts, 1 <i>Solanum dulcamara</i> , seed, 1 <i>Lycopus europaeus</i> mericarp; from peat
UtC-10189	4933 ± 42	Maren 01	57 <i>Carex rostrata</i> fragments & nuts, 8 <i>Alisma plantago aquatica</i> fruits; from peat
UtC-10190	5047 ± 42	Maren 03	91 <i>Carex rostrata</i> fragments & nuts, 6 <i>Alnus glutinosa</i> nuts, 7 <i>Carex acuta</i> nuts, 3 <i>Oenanthe aquatica</i> mericarps, 1 <i>Solanum dulcamara</i> seed; from peat
UtC-10191	4598 ± 40	Maren 04	10 <i>Alnus glutinosa</i> nuts, 9 <i>Alisma plantago aquatica</i> fruits, 22 <i>Scirpus lacustris</i> nuts, 1 <i>Solanum dulcamara</i> seed, 1 <i>Carex rostrata</i> nut, 4 <i>Carex acuta</i> nuts, 3 <i>Oenanthe aquatica</i> mericarps, 1 <i>Urtica dioica</i> fruit, 1 Bud scales, 10 Abscission layers; from peat
UtC-10192	4478 ± 37	Maren 05	180 Bud scales, 8 Buds, 15 Leaf remains; from peat
UtC-10193	5310 ± 50	Maren 07	Charcoal, 1 <i>Urtica dioica</i> fruit, 1 Abscission layer; from peat
UtC-10206	4770 ± 48	KrRijn99-01	Charcoal, 1 <i>Oenanthe aquatica</i> mericarp
UtC-10207	6930 ± 60	KrRijn99-02	3 <i>Oenanthe aquatica</i> mericarps, 22 <i>Urtica dioica</i> fruits, 6 <i>Alnus glutinosa</i> nuts, 3 <i>Carex acuta</i> nuts, 2 <i>Alisma plantago aquatica</i> fruits, 1 Abscission layer
UtC-10208	6230 ± 50	KrRijn99-03	57 Bud scales, 6 Abscission layers, 1 Leaf remains, 1 <i>Alnus glutinosa</i> nut, 1 <i>Carex rostrata</i> nut
UtC-10209	5133 ± 47	LvHA99-02	1 <i>Alnus glutinosa</i> cone, 3 <i>Alnus glutinosa</i> nuts, 3 <i>Carex rostrata</i> nuts, 19 <i>Alisma plantago aquatica</i> fruits, 1 <i>Lycopus europaeus</i> mericarp
UtC-10210	6072 ± 48	LvHA99-04	26 <i>Oenanthe aquatica</i> mericarps, 24 <i>Alnus glutinosa</i> nuts, 21 <i>Alisma plantago aquatica</i> fruits, 6 <i>Lycopus europaeus</i> mericarps, 12 Leaf remains, 1 Bud, 6 Bud scales
UtC-10211	6227 ± 40	Herwijnen-01	69 <i>Alisma plantago aquatica</i> , fruits, 21 <i>Oenanthe aquatica</i> mericarps, 4 <i>Alnus glutinosa</i> nuts, 13 <i>Polygonum</i> sp. Fruits, 3 <i>Carex</i> sp. fragments nuts, 5 <i>Urtica dioica</i> fruits, 7 Leaf remains, 1 Bud scale; from peat
UtC-10259	5017 ± 41	Velddriel99-01	24 <i>Scirpus lacustris</i> nuts, 3 <i>Carex</i> sp. Nuts, 3 <i>Oenanthe aquatica</i> mericarps, <i>Alisma plantago aquatica</i> fruits, 1 <i>Alnus glutinosa</i> nut; from peat
UtC-10288	5650 ± 100	KrRijn99-04	2 <i>Mentha aquatica</i> mericarps, 1 <i>Scirpus</i> nut, 2 <i>Alisma plantago aquatica</i> fruits, 170 <i>Typha</i> fruits
UtC-10289	5630 ± 100	LvHA99-01	5 <i>Alnus glutinosa</i> nuts, 15 <i>Carex acuta</i> nuts, 2 <i>Juncus</i> seeds, 1 Bud scale
UtC-10290	7221 ± 49	Alblas99-01	15 <i>Carex</i> sp. fragments nuts, 3 <i>Alnus glutinosa</i> nuts, <i>Alisma plantago aquatica</i> fruits, 2 <i>Potentilla</i> fruits, 1 <i>Carex rostrata</i> nut, 1 <i>Oenanthe aquatica</i> mericarp, 1 <i>Urtica dioica</i> fruit, 1 <i>Lycopus europaeus</i> mericarp; from clayey peat
UtC-10291	7100 ± 80	Lopikerkapel-01	12 <i>Alnus glutinosa</i> nuts, 6 Leaf remains, 1 Bud scale; from clayey peat
UtC-10333	5079 ± 41	Stolwijk-01	10 <i>Alnus glutinosa</i> , nuts, 14 <i>Carex acuta</i> , nuts, 14 <i>Carex rostrata</i> nuts; from humic clay
UtC-10334	1414 ± 48	Leidsche Rijn LR8 sleuf10	2 <i>Lychnis flos-cuculi</i> seeds, 2 <i>Lycopus europaeus</i> mericarps, 2 <i>Oenanthe aquatica</i> mericarps, 1 <i>Carex</i> sp. nut, 1 Leaf remains; from humic clay
UtC-11126	2590 ± 50	Dreumel-08	3 <i>Oenanthe aquatica</i> mericarps; 6 <i>Alisma plantago aquatica</i> fruits; 1 <i>Typha</i> ; 1 <i>Scirpus lacustris</i> nut; 1 <i>Rumex palustris</i> fruit; 2 <i>Polygonum</i> sp. fruit
UtC-11127	3460 ± 80	Dreumel-09	10 <i>Alnus glutinosa</i> nuts; 3 <i>Carex riparia</i> nuts; 4 <i>Alisma plantago aquatica</i> fruits; 1 leaf remains; 1 Bud scale
UtC-11128	4797 ± 42	Dreumel-10	6 <i>Carex rostrata</i> nuts; 5 <i>Carex acuta</i> nuts; 7 <i>Scirpus lacustris</i> nuts; 13 <i>Alisma plantago aquatica</i> fruits
UtC-11129	7647 ± 44	Dreumel-11	ca. 60 knopschubben; 2 buds; leaf remains
UtC-11130	2300 ± 38	Bambulk-01	Leaf remains
UtC-11131	2818 ± 33	Bambulk-03	85 <i>Scirpus lacustris</i> nuts
UtC-11132	3058 ± 44	Bambulk-04	15 <i>Oenanthe aquatica</i> mericarps; 2 <i>Scirpus lacustris</i> nuts; 1 <i>Alisma plantago aquatica</i> fruit; 6 leaf remains
UtC-11133	5734 ± 43	Bambulk-05	8 <i>Alnus glutinosa</i> nuts; 25 <i>Alisma plantago aquatica</i> fruits; 1 <i>Oenanthe aquatica</i> mericarps; 5 <i>Polygonum</i> ; 6 Bud scales
UtC-11134	2058 ± 47	Achterhoek-02	2 <i>Scirpus lacustris</i> nuts; 1 <i>Carex</i> sp. nut; 1 <i>Alisma plantago aquatica</i> fruit; 3 <i>Potamogeton</i> fruits; 1 <i>Nuphar</i>
UtC-11135	3000 ± 80	Passewaaij-2	85 <i>Typha</i> ; 1 bud scale; 5 charcoal pieces

UtC-11136	2238 ± 32	Loefkamp-01	25 Scirpus lacustris nuts; 8 Oenanthe aquatica mericarps
UtC-11137	4714 ± 42	Loefkamp-06	26 Scirpus lacustris nuts; 11 Carex rostrata nuts; 9 Alisma plantago aquatica fruits; 2 Oenanthe aquatica mericarps; 2 Typha
UtC-11138	5955 ± 44	Bergambacht-01	27 Alnus glutinosa nuts; 5 Scirpus lacustris nuts
UtC-11139	1774 ± 35	Zeist-PTT-02	2 Alnus glutinosa nuts; 14 leaf remains; 3 bud scales
UtC-11179	2907 ± 31	Heldam-01	Charcoal
UtC-11180	3456 ± 41	Heldam-02	30 Scirpus lacustris nuts; 7 Carex rostrata nuts
UtC-11181	3840 ± 45	Heldam-03	ca. 95 Scirpus lacustris nuts
UtC-11182	4053 ± 43	Heldam-04	34 Typha; 7 Alisma plantago aquatica fruits; 2 Carex sp. nuts; 1 Oenanthe aquatica mericarps; charcoal
UtC-11183	4221 ± 37	Heldam-05	7 Carex rostrata nuts; 6 Alnus glutinosa nuts; 1 Scirpus lacustris nut; 10 Alisma plantago aquatica fruits; 10 Polygonum fruits; 1 bud scale
UtC-11184	3973 ± 38	Heldam-06	3 Scirpus lacustris nuts; 7 Alisma plantago aquatica fruits; 1 bud scale
UtC-11990	4444±38	Heldam 7	84 Alisma plantago-aquatica seeds, 1/3 Carex seed, 1 Cicuta virosa seed, 9 Lythrum salicaria seeds, 21 Mentha aquatica seeds, 20 Rorippa palustris seeds, 1 Stachys palustris seed, 12 Typha latifolia/angustifolia seeds, 9 Urtica dioica seeds.
UtC-11991	4990±45	Heldam 8	1 Alisma plantago-aquatica seed, 15 Alnus fruits, 2 Cicuta virosa seeds, 1 Cruciferae seed, 3 Juncus seeds, 2 Lythrum salicaria seeds, 9 Mentha aquatica seeds, 3 Ranunculus flammula seeds, 7 Typha latifolia/angustifolia seeds.
UtC-11987	2653±45	Oude Rijn 1	28 Alnus fruits, 8 bud scales, 1 male cone
UtC-11988	2683±42	Oude Rijn 2	30 Alnus fruits, 2 male catkin scales, 1 Solanum sp. seed
UtC-11989	3625±37	Oude Rijn 3	2 Alnus female cone axes, 1 male cone axis
UtC-12336	6238±49	Ruigeweide I	4 Compositae eupatorium, 10 Carex, 8 Umbelliferae cf. Berula erecta/Sium, 1 Menta, 1 Lythrum salicaria
UtC-12337	6950±50	Ruigeweide II	6 Scirpus Lacustris, 2 Polygonium/Rumex, 1 Stachys palustris
UtC-12338	6210±50	Montfoort I	1 <sup>1</sup> / <sub>3</sub> Scirpus Lacustris, 2 Oenante aquatica, 1 <sup>1</sup> / <sub>3</sub> Carex trichonis
UtC-12339	6590±50	Montfoort II	1 Oenante aquatica, 2 Scirpus lacustris
UtC-12340	6261±49	ZBen-eind I	4 <sup>1</sup> / <sub>2</sub> Alnus, 3 <sup>1</sup> / <sub>2</sub> Alisma plantago aquatica, 1 Stachys palustris
UtC-13762	2640 ± 70	Wijngaarden-1	2 Alnus glutinosa fruits,
UtC-13763	3010 ± 60	Wijngaarden-2	8 Alnus glutinosa fruits, 1 mcs, 3 Carex sp.
UtC-13764	3380 ± 70	Wijngaarden-3	2 Umbelliferae, 12 Alnus glutinosa fruits, 57 mcs, 1 twig, 1 Carex sp., 1 Lemna, 1 Oenanthe aquatica
UtC-13765	3849 ± 47	Wijngaarden-4	2 Alnus glutinosa fruits, 2 male catlin axis, 1 female catlin scale, 10 hairy budscale, 13 budscale, 3 Carex sp., 8 Urtica dioica
UtC-13766	4090 ± 50	Wijngaarden-5	2 Alnus glutinosa fruits, 1/3 Corylus avellana
UtC-13767	4406 ± 45	Wijngaarden-6	3 Alnus glutinosa fruits, 1/3 Corylus avellana
UtC-13768	4330 ± 60	Wijngaarden-7	1 Alisma plantago-aquatica, 4 Alnus glutinosa fruits, 1 male catlin axis, 10 hairy budscale, 1 Filipendula ulmaria
UtC-13799	4410 ± 60	Wijngaarden-8	1 Alisma plantago-aquatica, 5 Alnus glutinosa fruits, 1 mcs, 2 twigs, 7 budscale
UtC-13800	4500 ± 60	Wijngaarden-9	3 Alisma plantago-aquatica, 1 Alnus glutinosa fruits, 10 budscale, 1 Typha sp. 1 indet.
UtC-13801	4630 ± 50	Wijngaarden-10	2 Alnus glutinosa fruits, 1/4 male catlin axis, 1 mcs, 10 budscale, 1 Caltha palustris
UtC-13802	4960 ± 60	Wijngaarden-11	1 Alnus glutinosa female catlin axis
UtC-13803	5090 ± 50	Wijngaarden-12	1 Alisma plantago-aquatica, 3 Alnus glutinosa fruits, 1/4 male catlin axis, 1 twig, 9 budscale, 1/2 Caltha palustris, 1 indet.
UtC-13804	5280 ± 50	Wijngaarden-13	2 Alisma plantago-aquatica, 19 Alnus glutinosa fruits, 5 budscale, 1 Berula erecta, 1 Carex sp. 2 Galium sp. 1 Mentha aquatica
UtC-13805	5600 ± 70	Wijngaarden-14	1 Alisma plantago-aquatica, 6,5 Alnus glutinosa fruits, 3 budscale, 2 Carex sp. 2 Galium sp.
UtC-13806	5290 ± 80	Wijngaarden-15	2 Umbelliferae indet., 1 Alnus glutinosa fruit, 3 mcs, 1,5 budscale, 1 Berula erecta, 1/4 Solanum dulcamara
UtC-13807	5520 ± 70	Wijngaarden-16	1 Alnus glutinosa fruit, 1 mcs, 1 budscale, 2 Berula erecta, 1 Carex paniculata/appropinquata, 3,5 Carex sp., 2 Mentha aquatica
UtC-13808	6080 ± 80	Wijngaarden-17	1 Umbelliferae indet., 1 Alnus glutinosa fruit, 8 Berula erecta, 2 Carex paniculata/appropinquata, 3 Carex sp. biconvex nutlet, 5 Carex sp. tn, 2 Phragmites australis, 16 Typha, 0,5 Viola
UtC-13809	6850 ± 80	Wijngaarden-18	1 Umbelliferae indet., 1 Alnus glutinosa fruit, 3/4 male catlin axis, 24 Berula erecta, 0,5 Carex sp. biconvex nutlet, 1 Lythrum salicaria, 1 Mentha aquatica, 4 Phragmites australis, 2,5 Sium latifolium, 0,5 Sparganium erectum, 3 Typha
UtC-13810	6470 ± 80	Wijngaarden-19	1 Umbelliferae indet., 1 Alnus glutinosa fruit, 3/4 male catlin axis, 24 Berula erecta, 0,5 Carex sp. biconvex nutlet, 1 Lythrum salicaria, 1 Mentha aquatica, 4 Phragmites australis, 2,5 Sium latifolium, 0,5 Sparganium erectum, 3 Typha
UtC-13811	6000 ± 80	Wijngaarden-20	2 Umbelliferae indet., 1 Alnus glutinosa fruit, 1/10 male catlin axis, 1 budscale, 1 Berula erecta, 0,5 Carex sp. tn, 2 Mentha aquatica, 1 Phragmites australis
UtC-13501	4020 ± 70	De Treeft-1	2 Alisma plantago aquatica, 10 Alnus glutinosa fruits, 2 male catlin axis, 2 Berula erecta, 1/4 Carex sp., 5 Oenanthe aquatica
UtC-13502	4210 ± 70	De Treeft-2	6 Alisma plantago aquatica, 1,5 Carex sp. tn, 3 Mentha aquatica, 1 Oenanthe aquatica
UtC-13503	5030 ± 80	De Treeft-3	1 Umbelliferae indet., 15 Alisma plantago aquatica, 11 Alnus glutinosa fruit, 1 male catlin axis, 4 female catlin axis, 2 twigs, 10 budscale, 1 Berula erecta, 2 Mentha aquatica, 1,5 Ranunculus acris/repens
UtC-13769	4850 ± 60	De Treeft-A	14 Alisma plantago aquatica, 1 flower, 18 Alnus glutinosa fruits, 3 fms, 1 twig, 2 budscale, 2,5 Berula erecta, 1 Mentha aquatica, 2 Oenanthe aquatica, 2 Polygonum sp., 1 Sagittaria sagitifolia, 1 Salix sp. ca, 2 budscale, 1 twig
UtC-13770	4680 ± 70	De Treeft-B	14 Alisma plantago aquatica, 1 flower, 18 Alnus glutinosa fruits, 3 fms, 1 twig, 2 budscale, 2,5 Berula erecta, 1 Mentha aquatica, 2 Oenanthe aquatica, 2 Polygonum sp., 1 Sagittaria sagitifolia, 1 Salix sp. ca, 2 budscale, 1 twig
UtC-13771	4780 ± 60	De Treeft-C	14 Alisma plantago aquatica, 1 flower, 18 Alnus glutinosa fruits, 3 fms, 1 twig, 2 budscale, 2,5 Berula erecta, 1 Mentha aquatica, 2 Oenanthe aquatica, 2 Polygonum sp., 1 Sagittaria sagitifolia, 1 Salix sp. ca, 2 budscale, 1 twig
UtC-13772	4740 ± 140	De Treeft-D	14 Alisma plantago aquatica, 1 flower, 18 Alnus glutinosa fruits, 3 fms, 1 twig, 2 budscale, 2,5 Berula erecta, 1 Mentha aquatica, 2

UtC-13510	6170 ± 150	De Woerd-1	<i>Oenanthe aquatica</i> , 2 <i>Polygonum</i> sp., 1 <i>Sagittaria sagittifolia</i> , 1 <i>Salix</i> sp. ca, 2 budscales, 1 twig
UtC-13511	5840 ± 80	De Woerd-2	1 <i>Ranunculus</i> , 17 <i>Alisma</i> , 1 <i>Carex</i> dh, 7 <i>Carex</i> pl, 2 <i>Scirpus lacustris</i> , 3 <i>Lythrum</i> , 1 Umbelliferae, 1 <i>Lycopus</i>
UtC-13512	4680 ± 130	De Woerd-3	0,5 <i>Carex</i> , <i>Stachys</i> , 5 <i>Mentha</i> , 2,5 <i>Oenanthe aquatica</i>
UtC-13504	4240 ± 90	De Woerd-5	1 <i>Carex</i> , 0,5 <i>Scirpus</i>
UtC-13505	4480 ± 120	De Woerd-6	<i>Scirpus</i> , <i>Lythrum salicaria</i> , 1 <i>Typha</i>
UtC-13506	4520 ± 130	De Woerd-7	14 <i>Carex</i> , 11 <i>Scirpus</i> , 2 <i>Typha</i> , 1 <i>Lythrum</i>
UtC-13507	4910 ± 80	De Woerd-8	14 <i>Scirpus lacustris</i>
UtC-13508	5440 ± 100	De Woerd-9	2 <i>Carex</i> , 0,5 <i>Scirpus lacustris</i> , 4 <i>Lythrum</i>
UtC-13509	5590 ± 90	De Woerd-10	4,5 <i>Alnus</i> , 3 Umbelliferae, 4 <i>Alisma</i> , 2 <i>Mentha</i> , 2,5 <i>Berula erecta</i> , 3 <i>Carex</i>
UtC-13812	3100 ± 70	Zevender-3	3 <i>Alnus</i> , 1 <i>Ranunculus</i>
UtC-13813	5050 ± 50	Zevender-5	21 <i>Urtica dioica</i>
UtC-13814	6910 ± 90	Zevender-7	13 <i>Rubus</i>
UtC-14213	1567 ± 44	Gouw-Wageningen-1	4 <i>Alisma</i> , 3 <i>Alnus</i> , 2 buds
UtC-14214	2873 ± 48	Gouw-Opheusden-1	
UtC-14215	4454 ± 49	Gouw-Opheusden-2	
UtC-14216	5210 ± 49	Gouw-Opheusden-3	
UtC-14217	5820 ± 70	Gouw-Opheusden-5	
UtC-14218	3131 ± 46	Gouw-Deest-2	
UtC-14219	4050 ± 60	Gouw-Deest-3	
UtC-14220	3033 ± 45	Gouw-Ravenstein	
UtC-14221	7090 ± 90	Cohen-A4Leiden-NM1	19 <i>Alnus glutinosa</i> (fruits), 6 <i>Alnus glutinosa</i> (budscales), 2 <i>Lycopus europaeus</i> , 1/2 <i>Solanum dulcamara</i>
UtC-14222	6840 ± 70	Cohen-A4Leiden-NM2	2 <i>Alisma plantago aquatica</i> , 1 <i>Berula erecta</i> , 2,5 <i>Carex</i> sp. (1 perichynium, 1 nutlet, 0,5 triconvex nutlet), 1 <i>Cladium mariscus</i> , 1 <i>Oenanthe aquatica</i> , 1 <i>Ranunculus acris/repes</i> (nutlet)
UtC-14223	6840 ± 60	Cohen-A4Leiden-NM10	2 <i>Alisma plantago aquatica</i> , 3 <i>Alnus glutinosa</i> (1 male catskin seed, 2 budscales), 2 <i>Berula erecta</i> , 4 <i>Carex</i> sp. (4 biconvex nutlets)
UtC-14224	7880 ± 70	Cohen-PGA-P07	1 <i>Epilobium</i> , 2 <i>Hypericum perforatum</i> , 1 <i>Oenanthe aquatica</i> , 2 <i>Pimpinella</i>
UtC-14225	6920 ± 60	Cohen-MID-0507001	<i>Alnus</i> seeds
UtC-14226	6470 ± 70	Cohen-NES-M1b	<i>Alnus glutinosa</i> fruits, male and female catskinscales
UtC-14227	6620 ± 70	Cohen-NES-M2b	<i>Carex</i> seeds, 2 <i>Alnus</i> buds, 1 <i>Rumex</i>
UtC-14228	6900 ± 80	Cohen-NES-M3b	Cocktail of <i>Scirpus</i> , <i>Carex</i> , <i>Sparganium</i>
UtC-14229	7490 ± 80	Cohen-NES-M4ab	Cocktail of <i>Scirpus</i> , <i>Carex</i>
UtC-14230	8330 ± 70	Cohen-NES-M5c1	Seeds
UtC-14231	8250 ± 70	Cohen-NES-M5c2	<i>Cornus</i> seeds
UtC-14232	8380 ± 70	Cohen-NES-M5c3	<i>Alisma</i> seeds
UtC-14272	4099 ± 47	Zoowijk-1A	<i>Roripa</i> seeds
UtC-14344	4350 ± 70	Zoowijk-1B	
UtC-14273	4383 ± 50	Zoowijk-1C	
UtC-14345	4760 ± 80	Zoowijk-1D	
UtC-14274	7120 ± 90	Zoowijk-1E	
UtC-14346	7810 ± 60	Zoowijk-1F	
UtC-14347	8110 ± 70	Zoowijk-1G	
UtC-14348	8310 ± 90	Zoowijk-1H	
UtC-14343	4525 ± 47	Zoowijk-2A	
UtC-14271	5077 ± 41	Zoowijk-2B	
UtC-14349	2584 ± 46	Lange Avontuur-1	27 <i>Carex</i> , 0,5 <i>Stachys palustris</i>
UtC-14275	4047 ± 47	Lange Avontuur-2	192 <i>Typha</i> , 2 <i>Carex</i> , 1,33 <i>Carex</i> (tri), 2,5 <i>Alisma</i> , 0,5 <i>Oenanthe aquatica</i> , 13 <i>Lythrum</i>
UtC-14276	5022 ± 50	Lange Avontuur-3	2 <i>Frangula Alnus</i> , 2 <i>Lygchnis flos-cuculi</i> , 1 <i>Alnus</i> fruit, 3 male catkin scales, 2 <i>Rubus</i>
UtC-14350	6980 ± 50	Lange Avontuur-5	5,5 <i>Alnus</i> fruits, 3 biconvex <i>Carex</i> nutlets, 1 trigonous <i>Carex</i> nutlet, 2 <i>Alisma plantago-aquatica</i> , 1 <i>Phragmites australis</i> , 1,25 <i>Stachys palustris</i> , 1 <i>Mentha aquatica</i> , 1 <i>Oenanthe aquatica</i>
UtC-14351	4240 ± 60	Zeedijk-1	1 <i>Valeriana</i> , 1 <i>Stachys palustris</i> , 4 <i>Mentha aquatica</i> , 0,5 <i>Ranunculus acris/repens</i> , 15 <i>Typha</i> , 6 <i>Lythrum</i>
UtC-14352	5210 ± 60	Zeedijk-2	1,33 <i>Carex</i> (tri), 30 <i>Lythrum</i> , 1 <i>Stachys palustris</i> , 59 <i>Typha</i> , 3 <i>Alnus</i> fruits, 2,5 <i>Lycopus europaeus</i> , 2 <i>Mentha aquatica</i> , 8 <i>Berula erecta</i>
UtC-14353	5220 ± 90	Zeedijk-3	1 <i>Alnus</i> fruits, 107 <i>Lythrum</i> , 5 <i>Carex</i> (tri), 0,25 <i>Stachys palustris</i>
UtC-14277	5830 ± 60	Zeedijk-4	1 <i>Alnus</i> twig
UtC-14278	6010 ± 60	Zeedijk-5	<i>Alnus</i> mix: 2 twigs, 3 budscales, 5 fruits, 1 fragment male catkin, 3 male catkin scales
UtC-14354	7620 ± 70	Zeedijk-6	36 <i>Urtica dioica</i> , 6 <i>Oenanthe aquatica</i> , 2 <i>Solanum dulcamara</i> , 4 <i>Alnus</i> fruits
UtC-14355	3100 ± 50	Voetakkers-1	1,5 <i>Alnus</i> fruits, 8 male <i>Alnus</i> catkin scales, 5 <i>Alisma plantago aquatica</i> , 0,5 <i>Carex</i>

UtC-14279	5340 ± 50	Voetakkers-4	12 <i>Alnus</i> fruits
UtC-14280	5540 ± 60	Voetakkers-5	50 <i>Alisma plantago-aquatica</i>
UtC-14281	6100 ± 50	Voetakkers-6	3 <i>Oenanthe aquatica</i> , 25 <i>Lythrum</i> , 12 <i>Carex</i> (tri), 2 <i>Scirpus lacustris</i> , 3 <i>Mentha aquatica</i> , 0.5 <i>Stachys palustris</i> , 1 <i>Berula erecta</i> , 1 <i>Lycopus europaeus</i>
UtC-14356	3230 ± 70	Voetakkers-8	3 <i>Alisma plantago-aquatica</i> , 12 <i>Urtica</i> , 1 <i>Carex</i> , 0.5 <i>Oenanthe aquatica</i> , 1 <i>Carex</i> (tri)
UtC-14282	3057 ± 45	Waardenburg-1	5 <i>Carex</i> (tri), 1 <i>Sparganium</i>
UtC-14283	4790 ± 60	Waardenburg-2	4 <i>Carex pseudo-cyperus</i> , 28 <i>Alisma plantago-aquatica</i> , 2 <i>Sagittaria sagittifolia</i> , 3 <i>Lycopus europaeus</i> , 9 <i>Mentha aquatica</i>
UtC-14357	5710 ± 70	Waardenburg-3	1 <i>Solanum dulcamara</i> , 0.1 <i>Oenanthe aquatica</i> , 0.1 <i>Sparganium spec.</i> , leaf fragments
UtC-14284	5270 ± 50	Regterweide-1	8 <i>Alisma plantago-aquatica</i> , 5.25 <i>Carex</i> (tri), 5 <i>Alnus</i> fruits, 8 <i>Berula erecta</i>
UtC-14285	5224 ± 49	Regterweide-2	<i>Alnus</i> mix: 3 fruits, 3 twigs, 3 budscales
UtC-14286	5820 ± 60	Regterweide-3	<i>Alnus</i> mix: 2 twigs, 19 male catkin scales, 2.5 fruits, 1 female catkin scales
UtC-14287	3173 ± 43	Hedel-1	3 <i>Oenanthe aquatica</i> , 8 <i>Alnus</i> fruits, 5 <i>Alnus</i> budscales, 2 <i>Salix</i> budscales
UtC-14288	4750 ± 50	Hedel-2	<i>Alnus</i> mix: 3 twigs, 30 male catkin scales, 11 fruits, 6 budscales
UtC-14289	4860 ± 60	Hedel-3	1 <i>Sium latifolium</i> , leaf fragments
UtC-14290	2189 ± 40	Bokhoven-3	6.5 <i>Scirpus lacustris</i> , 0.5 <i>Oenanthe aquatica</i>
UtC-14358	3170 ± 70	Bokhoven-4	10 <i>Alisma plantago-aquatica</i> , 2 <i>Typha</i> , 0.5 <i>Ranunculus scleratus</i> , 1 <i>Lythrum</i> , 3 <i>Mentha aquatica</i> , 1 male <i>Alnus</i> catkin scale
UtC-14291	4362 ± 47	Driel	seeds
UtC-14569	6010 ± 60	Linschoten LIN-7	<i>Scirpus</i> seeds
UtC-14570	5730 ± 60	Linschoten LIN-12	Cocktail: <i>Scirpus</i> , <i>Ranunculus</i> , <i>Galium</i>
UtC-14571	6810 ± 80	Dekzand W DZW-37	<i>Alnus</i> seeds
UtC-14572	6360 ± 60	Dekzand W DZW-21	<i>Scirpus</i> seeds
UtC-14573	2367 ± 44	Weesp-1	<i>Alnus glutinosa</i> : 2 twigs
UtC-14574	2920 ± 70	Spengen-2	1 <i>Alnus</i> male catkin scale, 17 <i>Urtica dioica</i> , 1 <i>Phragmites australis</i>
UtC-14575	1577 ± 43	Loenen-1	<i>Alnus glutinosa</i> : 1 female catkin scale, 3 male catkin scales, 1 male catkin axis, 26 fruits, 4 budscales
UtC-14576	2414 ± 47	Noordeinde-1	4 <i>Alnus glutinosa</i> fruits, 2 <i>Berula erecta</i> , 1 <i>Alisma plantago-aquatica</i> flowerhead, 1 <i>Alisma plantago-aquatica</i> fruit, 1 <i>Oenanthe aquatica</i> , 1 <i>Rorippa amphibia</i> , 1/5 <i>Solanum dulcamara</i> , 1 <i>Lythrum salicaria</i>
UtC-14577	2420 ± 50	Gein-1	<i>Alnus glutinosa</i> : 4 female catkin scales, 24 male catkin scales, 19 fruits, 4 budscales
UtC-14578	2853 ± 46	Angstel-1	<i>Alnus glutinosa</i> : 2 twigs, 4 female catkin scales, 4 male catkin scales, 5 fruits,
UtC-14579	1970 ± 60	Winkel-4	1 <i>Alnus glutinosa</i> fruit, 8 <i>Urtica dioica</i> , 4 <i>Lycopus europaeus</i> , 2 <i>Lythrum salicaria</i> , 1,3 <i>Carex</i> sp. (trigonous), 1 <i>Carex paniculata</i> group
UtC-14580	1694 ± 45	Winkel-5	<i>Alnus glutinosa</i> : 2 male catkin axis, 1 twig, 3 budscales, 2 fruits
UtC-14581	2280 ± 50	Weeresteijn-1	<i>Alnus glutinosa</i> : 1 catkin
UtC-14582	2810 ± 50	Weeresteijn-2	<i>Alnus glutinosa</i> : 1 catkin
UtC-14583	1877 ± 60	Portengen-2	3 <i>Alnus glutinosa</i> fruits, 2 <i>Berula erecta</i> , 5 <i>Alisma plantago-aquatica</i> fruit, 2.5 <i>Urtica dioica</i> , 1 <i>Oenanthe aquatica</i> , 11 <i>Mentha aquatica</i> , 1/2 <i>Lycopus europaeus</i> , 1 <i>Carex paniculata</i> group, 2 <i>Phragmites australis</i> , 10 <i>Typha</i> sp.
UtC-14584	2870 ± 47	Portengen-3	<i>Alnus glutinosa</i> : 2 twigs, 3.5 fruits, 13 budscales, 5 buds
UtC-14585	2352 ± 45	Vecht-1a	9 <i>Alisma plantago-aquatica</i> , 1,5 <i>Lycopus europaeus</i> , 5 <i>Lythrum salicaria</i> , 2 <i>Urtica dioica</i> ; root remains