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Supplementary Materials for

Agricultural lime disturbs natural strontium isotope variations: Implications for provenance and migration studies

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The PDF file includes:

Table S1. Strontium isotope and concentration data for surface water, groundwater, rainwater, and reference samples.

Table S2. Basic statistical data on strontium isotopic composition (⁸⁷Sr/⁸⁶Sr) and strontium concentration of pristine and farmland samples.

Table S3. Strontium isotope and concentration data for agricultural lime products, fertilizers, and animal feed.

Table S4. Calculated strontium isotope composition and concentration for two farms in the Vallerbæk area.

Fig. S1. Calcium carbonate distribution in glaciogenic deposits, middle Jutland.

Fig. S2. Simplified maps and description of localities.

Fig. S3. Influence of soil thickness and soil composition on the level of disturbance of the ⁸⁷Sr/⁸⁶Sr ratio from agricultural lime.

Fig. S4. Comparison of strontium concentrations measured by quadrupole ICP-MS and multicollector ICP-MS.

Reference (44)

Supplementary materials

Table S1. Strontium isotopic composition and concentration of surface water and reference samples. For each water sample, we show sample locality, sample number, sampling date, geographic coordinates (decimal Grade System), ⁸⁷Sr/⁸⁶Sr ratio, strontium concentration, 1/Sr conc. and distance from pristine water body to farmland. External reproducibility is determined from repeated analyses of Holocene Okinawa foramininiferal standards.

Linking Linking <thlinking< th=""> <thlinking< th=""> <thl< th=""><th>Locality</th><th>Sample no.</th><th>Date of</th><th>Latitude</th><th>Longitude</th><th>⁸⁷Sr/⁸⁶Sr</th><th>Sr</th><th>1/Sr</th><th>Distance to farming</th><th>Code*</th></thl<></thlinking<></thlinking<>	Locality	Sample no.	Date of	Latitude	Longitude	⁸⁷ Sr/ ⁸⁶ Sr	Sr	1/Sr	Distance to farming	Code*
I. Kongedal Plantage-Vallerback Stream-Karup River, (Fig. 3, SIA) Vallerback Stream V. Vallerback Stream K.3 31.08-2017 56.241281 9.238374 0.71350 0.006 154.42 120 VP - K.3 31.08-2017 55.264756 9.244798 0.71307 0.010 195.35 400 VP - K-14 08-06-2018 56.264795 9.23932 0.71286 0.010 10.08.0 370 VP - K-14 08-06-2018 56.268795 9.23932 0.71286 0.010 10.08.0 370 VP - K-65 22-11-2017 56.270895 9.224567 0.71059 0.048 2.0.95 VF - K-64 0.91-1.2017 56.303477 0.15960 0.70970 0.113 0.048 2.0.97 VF - KAM 0.91-1.2017 56.40313 0.028383 0.70970 0.113 9.07 VF - KAM 0.91-1.2017 56.403131 0.088331	2000.109	campie noi	collection	Latitude	Longitude	017 01	(mg/L)	2,0.	(m)	0040
Vallerbak Stream K-5 18-10-2017 56.241283 0.21350 0.006 154.42 1200 VP - K-1 31.08-2017 56.261764 0.223835 0.71307 0.010 95.36 490 VP - K-14 0.86-018 56.269149 9.231928 0.71305 0.025 33.80 189 VP - K-14 0.86-018 56.269149 9.213289 0.71305 0.025 33.80 189 VP - K-64 0.84-0-018 56.269149 9.213280 0.7098 0.084 1.0.9 VF - K-64 0.96-0218 56.270859 9.224567 0.71350 0.028 1.0.9 VF - K-64 0.96-0218 56.270859 9.24567 0.71350 0.028 1.1.9 VF - K-64 0.96-2018 56.270819 9.214920 7.0707 0.090 11.15 VF - K-74 13-02.2018 56.377812 9.070640	1. Kompedal Plantage-V	allerbæk Strean	n-Karup River, (Fi	ig. 3, S1A)						
- K-3 31.0-92.017 55.264751 9.24738 0.71317 0.000 134.82 420 WP - K-2 31.0-82.017 55.264756 9.24738 0.71305 0.010 10.300 370 WP - K-14 0.80-62.018 56.266495 9.231289 0.71305 0.025 39.80 139 WP - K-6 0.22117 55.27628 9.229416 7.1725 0.005 1.40 WP - K-6 0.80-6.2018 56.278578 9.229457 7.17153 0.038 2.660 WF - K-44 31.0-8.2017 55.531377 9.129020 0.70973 0.103 9.70 WF - KAM 0.911.2017 56.303477 9.128900 0.70973 0.103 9.70 WF Karup R at Hagebro KAHA 0.911.2017 56.40139 9.04445 0.70940 0.119 9.17 WF Karup R at Hagebro KAHA 1.30.2.2018 56.412679 </td <td>Vallerbæk Stream</td> <td>K-5</td> <td>18-10-2017</td> <td>56.241283</td> <td>9.283874</td> <td>0.71350</td> <td>0.006</td> <td>154.42</td> <td>1200</td> <td>WP</td>	Vallerbæk Stream	K-5	18-10-2017	56.241283	9.283874	0.71350	0.006	154.42	1200	WP
- K-1 31:08:2017 56:26736 9:24798 0.71268 0.0100 100.08 370 WP - K-14 08:06:2018 56:269419 9:231280 0.71268 0.010 100.08 370 WP - K-64 22:11:2017 56:276895 9:224567 0.7109 0.048 20:35 WF - K-64 32:0717 56:377895 9:224567 0.7109 0.048 20:35 WF - K-64 30:0717 56:377812 9:07054 0.71293 0.038 3:60 WF - KAM 09:11:2017 56:307312 9:074645 0.70970 0.111 9:02 WF Karup R4 Hagebro KAHA-2 13:02:2018 56:317812 9:074645 0.70970 0.111 9:02 WF Karup R4 Hagebro KAHA-2 13:02:2018 56:317813 9:07445 0.70970 0.111 9:02 WF Karup R4 Hagebro KAHA-2 13:02:2018 56:317813	-	K-3	31-08-2017	56.261781	9.252835	0.71317	0.007	134.82	420	WP
- K-2 31-08-2017 65.267736 9.237923 0.71268 0.010 10.08 370 WP - K-13 08-06-018 56.269858 9.22801 0.71265 0.036 28.00 59 WP - K-6 026-0218 56.270895 9.224567 0.71099 0.048 20.95 WF - K-6 026-0218 56.270895 9.224567 0.71093 0.069 1.40 WF - K-4 31.08-2017 56.303477 9.159800 0.70970 0.090 11.5 WF - KAM 09-11-2017 56.40313 9.008233 0.70954 0.110 9.06 WF Karup R at Hagebro KAHA 09-12-2017 56.40313 9.008233 0.70954 0.110 9.02 WF Karup R at Hagebro KAHA 13-02-2018 56.41803 9.248550 0.7130 0.011 9.02 WF Karup R at Tegebro KAHA 13-02-2017 56.047313 <td< td=""><td>-</td><td>K-1</td><td>31-08-2017</td><td>56.264756</td><td>9.244798</td><td>0.71307</td><td>0.010</td><td>95.36</td><td>490</td><td>WP</td></td<>	-	K-1	31-08-2017	56.264756	9.244798	0.71307	0.010	95.36	490	WP
- K-14 08.06.2018 56.269419 9.21289 0.71255 0.025 3.80 1.85 WP - K-66 22-11-2017 56.270895 9.224567 0.71099 0.048 20.95 WF - K-64 31.08-2017 56.270895 9.224567 0.71133 0.038 26.05 WF - K-64 31.08-2017 56.327087 9.207507 0.07993 0.039 1.60 WF - KAM 09-11.2017 56.337319 9.142200 0.70973 0.103 9.70 WF Karup R at Hagebro KAHA 09-11.2017 56.377812 9.074645 0.70970 0.111 9.02 WF Karup R at Hagebro KAAA 1.30-2.2018 56.317812 9.074454 0.70970 0.111 9.02 WF Karup R at Hagebro KAAA 1.30-2.2018 56.31408 8.83447 0.70944 0.113 8.43 WF Carup R at Hagebro KAA 1.30-2.2017 56.219763	-	K-2	31-08-2017	56.267736	9.237932	0.71268	0.010	100.80	370	WP
- K-13 0.806-6.2018 66.269858 9.22467 0.7129 0.036 2.205 WP - K-6a 0.806-018 56.270855 9.22457 0.71133 0.038 26.60 WF - K-4a 31.08-2017 56.270278 9.205702 0.70998 0.038 1.19 WF - KA40 09-11-2017 56.303477 9.153960 0.70970 0.090 1.15 WF - KAM 09-11-2017 56.406313 9.00823 0.70973 0.109 9.17 WF Karup R at Hagebro KAHA 1.30-2.2018 56.47812 9.074645 0.70970 0.111 9.02 WF Karup R at Resen KARE 1.30-2.2018 56.41638 8.98447 0.70946 0.115 8.72 WF Karup R at Hagebro KARE 1.30-2.2018 56.24951 9.31244 0.70940 0.115 8.72 WF Karup R at Resen KARE 1.30-2.2017 56.087313 9.204850	-	K-14	08-06-2018	56.269419	9.231289	0.71305	0.025	39.80	18§	WP
- K-6 22.11-2017 56.270895 9.224567 0.71139 0.048 20.95 WF - K-4 31.08-2017 56.275278 9.207502 0.70933 0.059 14.40 WF Karup River KA5 0.911-2017 56.3132747 9.19806 0.70977 0.039 11.15 WF - KAM 0.911-2017 56.313339 9.142200 0.70973 0.103 9.70 WF Karup R at Hagebro KAHA 0.911-2017 56.31333 9.002453 0.70954 0.101 9.00 WF Karup R at Hagebro KAHA 13-02-2018 56.317812 9.074645 0.70970 0.111 9.02 WF Karup R at Trevad KAT 13-02-2018 56.317181 9.074645 0.70944 0.119 8.44 WF Groundwatert KG-2 0.702017 56.25271 9.312944 0.7018 0.004 32.13 680 WP Groundwatert KG-2 0.702017 56.25271 <td>-</td> <td>K-13</td> <td>08-06-2018</td> <td>56.269858</td> <td>9.229301</td> <td>0.71245</td> <td>0.036</td> <td>28.00</td> <td>5§</td> <td>WP</td>	-	K-13	08-06-2018	56.269858	9.229301	0.71245	0.036	28.00	5§	WP
- K-6a 08-06-2018 5.27288 2.272567 0.7.1153 0.038 0.069 14.40 WP Karup River KAS 09-11-2017 56.30014 9.182303 0.70968 0.069 14.40 WP - KAM 09+11-2017 56.30317 9.159860 0.70970 0.030 9.70 WF Karup R Hagebro KAHA 09+11-2017 56.406313 0.008283 0.70970 0.1019 9.17 WF Karup R Hagebro KAHA 19-02-2018 56.377812 9.074645 0.70961 0.109 9.17 WF Karup R Hagebro KAHA 13-02-2018 56.317812 9.074645 0.70970 0.111 9.02 WF Karup R Hagebro KATR 13-02-2018 56.31743 9.38060 0.1191 8.44 WF Karup R Hagebro KATR 13-02-2018 56.21973 9.312440 0.7084 0.048 20.30 UF Groundwatert KG-2 07-06-2018 56.21976	-	K-6	22-11-2017	56.270895	9.224567	0.71099	0.048	20.95		WF
- K-4 31-08-2017 56.275278 9.207502 0.70993 0.064 11.40 WP Karup River KAM 09-11-2017 56.30477 9.159860 0.70973 0.030 11.15 WF - KAM 09-11-2017 56.31339 9.142920 0.70973 0.101 9.06 WF Karup R at Hagebro KAHA 09-11-2017 56.30313 9.002830 0.70954 0.110 9.06 WF Karup R at Hagebro KAHA 09-11-2017 56.636869 9.84471 0.70946 0.111 9.02 WF Karup R at Trevad KAT 13-02-2018 56.51408 9.882449 0.70944 0.113 8.44 WF Karup R at Trevad KAT 13-02-2018 56.21163 9.24850 0.7138 0.043 2.235 CF Groundwater‡ KG-3 0.70-2018 56.21707 9.363065 0.71183 0.003 3.4213 6.80 WP - G-2b 0.20-2017 56.0873	-	K-6a	08-06-2018	56.270895	9.224567	0.71153	0.038	26.60		WF
Karup River KAS 09-11-2017 56.30014 9.182303 0.70968 0.0494 11.97 WF - KAN 09-11-2017 56.313539 9.142920 0.70973 0.103 9.70 WF Karup R at Hagebro KAHA 09-11-2017 56.313339 9.142920 0.70973 0.103 9.70 WF Karup R at Hagebro KAHA 09-12-2018 56.377812 9.076454 0.70970 0.113 8.02 WF Karup R at Resen KARE 13-02-2018 56.514108 8.982449 0.70944 0.115 8.72 WF Karup R at Rærs KABA 13-02-2018 56.514108 8.982449 0.70944 0.115 8.72 CF Groundwater1 KG-2 07-06-2018 56.21473 9.30807 0.71183 0.048 20.90 1180 WP Groundwater1 KG-3 07-02017 56.087075 9.33807 0.71183 0.003 342.13 680 WP - G-2	-	K-4	31-08-2017	56.275278	9.207502	0.70993	0.069	14.40		WP
· KAM 09-11-2017 56.303477 9.155860 0.70970 0.003 9.70 WF Karup R at Hagebro KAHA 09-11-2017 56.406313 9.008283 0.70954 0.110 9.06 WF Karup R at Ragebro KAHA 13-02-2018 56.377812 9.074645 0.70970 0.111 9.02 WF Karup R at Resen KARE 13-02-2018 56.641869 8.984471 0.70944 0.119 8.44 WF Karup R at Bærs KABA 13-02-2018 56.52151 9.312944 0.70944 0.119 8.44 WF Karup R at Bærs KABA 13-02-2018 56.231453 9.280806 0.71318 0.003 18.60 190 WP Groundwatert KG-3 07-06-2018 56.231453 9.24850 0.71183 0.002 52.37 6.20 WP - G-2b 02-09-2017 56.08707 9.363807 0.71183 0.002 15.33 2.00 WP	Karup River	KAS	09-11-2017	56.290014	9.182303	0.70968	0.084	11.97		WF
· KAN 09-11-2017 56.313529 9.142920 0.70973 0.10 9.70 WF Karup R at Hagebro KAHA 09-11-2017 56.06313 9.070455 0.70961 0.109 9.17 WF Karup R at Resen KARE 13-02-2018 56.377812 9.074645 0.70970 0.111 9.02 WF Karup R at Resen KARE 13-02-2018 56.614108 8.982449 0.70944 0.119 8.44 WF Karup R at Bærs KABA 13-02-2018 56.514108 8.982449 0.70944 0.119 8.44 WF Karup R at Bærs KABA 13-02-2018 56.219763 9.248550 0.71081 0.003 342.13 680 WP Groundwater+ KG-2 0.70-6-2018 56.08707 9.363807 0.71183 0.003 342.13 680 WP 2. G-2 02-09-2017 56.08705 9.363807 0.71277 0.006 173.23 240 WP - G-2<	-	KAM	09-11-2017	56.303477	9.159860	0.70970	0.090	11.15		WF
Karup R at Hagebro KAHA 09-11-2017 56.406313 9.008283 0.70954 0.110 9.06 WF Karup R at Hagebro KAHA-2 13.02-2018 56.377812 9.074645 0.70970 0.111 9.02 WF Karup R at Trevad KARE 13.02-2018 56.51108 8.984471 0.70940 0.111 9.02 WF Karup R at Bars KAARA 13.02-2018 56.51108 8.924449 0.70940 0.015 8.72 WF Karup R at Hagebro K-A 29.10-2017 56.687317 9.12944 0.70804 0.045 22.35 CF Groundwater1 KG-2 0.70-6218 56.087317 9.63805 0.71183 0.003 342.13 680 WP - G-2 0.209-2017 56.087037 9.53805 0.71183 0.002 52.737 620 WP - G-3 0.209-2017 56.087047 9.71289 0.006 159.89 810 WP - G-2 10.90	-	KAN	09-11-2017	56.313539	9.142920	0.70973	0.103	9.70		WF
Karup R at Hagebro KAHA-2 13-02-2018 56.377812 9.074645 0.70961 0.1019 9.17 WF Karup R at Trevad KATR 13-02-2018 56.377812 9.074645 0.70946 0.111 9.02 WF Karup R at Trevad KATR 13-02-2018 56.514108 8.982449 0.70944 0.111 8.44 WF Knudstrup (Pond) K-7 29.10-2017 55.629251 3.91244 0.70840 0.048 20.90 1180 WP Groundwater1 KG-2 07-06-2018 56.21976 9.48500 0.7138 0.003 342.13 680 WP 2. Gludsted Plantage (Fig. SL) - G-2a 02-09-2017 56.087375 9.363065 0.71183 0.003 342.13 680 WP - G-2a 02-09-2017 56.08648 3.354797 0.71147 0.006 15.98 810 WP - G-1 01-09-2017 56.08648 3.354797 0.7109 0.011 9.304 150 </td <td>Karup R at Hagebro</td> <td>KAHA</td> <td>09-11-2017</td> <td>56.406313</td> <td>9.008283</td> <td>0.70954</td> <td>0.110</td> <td>9.06</td> <td></td> <td>WF</td>	Karup R at Hagebro	KAHA	09-11-2017	56.406313	9.008283	0.70954	0.110	9.06		WF
Karup R at Resen KARE 13-02-2018 56.377812 9.074645 0.70970 0.111 9.02 WF Karup R at Bærs KABA 13-02-2018 56.54108 8.982449 0.70944 0.119 8.72 WF Karup R at Bærs KABA 13-02-2018 56.21150 9.312944 0.70804 0.045 22.35 CF Groundwater4 KG-2 07-06-2018 56.219753 9.328850 0.71380 0.045 22.05 WP Groundwater4 KG-3 07-06-2018 56.087317 9.363065 0.71183 0.003 342.13 680 WP J G-2b 02-09-2017 56.087055 9.363055 0.71183 0.002 52.737 620 WP - G-1 01-09-2017 56.085255 9.34334 0.71147 0.009 151.29 WP Storá river G-3 02-09-2017 56.01352 9.24909 0.7109 0.010 159.89 MU WP Storá river G-3 <td>Karup R at Hagebro</td> <td>KAHA-2</td> <td>13-02-2018</td> <td>56.377812</td> <td>9.074645</td> <td>0.70961</td> <td>0.109</td> <td>9.17</td> <td></td> <td>WF</td>	Karup R at Hagebro	KAHA-2	13-02-2018	56.377812	9.074645	0.70961	0.109	9.17		WF
Karup R at Trevad KATR 13-02-2018 56.461869 9.894471 0.70946 0.119 8.72 WF Karup R at Bærs KABA 13-02-2018 56.514108 8.82449 0.70944 0.119 8.44 WF Groundwater1 KG-2 07-06-2018 56.231453 9.280806 0.71308 0.048 20.90 1180 WP Groundwater1 KG-3 07-06-2018 56.219763 9.248550 0.71308 0.048 20.90 1180 WP C G-2b 07-06-2018 56.08717 9.363007 0.71183 0.003 342.13 680 WP C G-2b 07-09-2017 56.087057 9.363005 0.71173 0.003 342.13 680 WP C G-3 07-09-2017 56.087057 9.363050 0.71133 0.002 17.32 240 WP Stori ariver G-3 07-09-2017 56.08930 9.312940 0.7107 0.011 9.030 16.35 WP	Karup R at Resen	KARE	13-02-2018	56.377812	9.074645	0.70970	0.111	9.02		WF
Kraup R at Bærs KABA 13-02-2017 56.51408 8.982449 0.70944 0.119 8.44 WF Knudstrup (Pond) K-7 29-10-2017 56.269251 9.312944 0.70804 0.015 22.35 CF Groundwater1 KG-2 0.7-06-2018 56.219763 9.248550 0.71391 0.048 20.90 118.00 WP 2. Gludsted Plantage (Fig. 51 9.2683607 0.71183 0.003 342.13 680 WP 2. Gludsted Plantage (Fig. 51 56.087375 9.363065 0.71183 0.002 52.737 620 WP - G-2 02-09-2017 56.087055 9.349365 0.71183 0.002 173.23 240 WP - G-1 0.109-2017 56.085045 9.349309 0.71039 0.006 159.89 810 WP - G-3 0.209-2017 56.051305 9.349300 0.71107 0.011 9.304 1550 WF	Karup R at Trevad	KATR	13-02-2018	56.461869	8.984471	0.70946	0.115	8.72		WF
Knudstrup (Pond) K-7 29-10-2017 56.269251 9.312944 0.70804 0.045 22.35 CF Groundwater1 KG-2 07-06-2018 56.231453 9.280806 0.71391 0.048 20.90 1180 WP 2. Gludsted Plantage (Fig. S1C) - G-20 0.07-06-2018 56.087317 9.363007 0.71183 0.003 342.13 680 WP - G-24 0.10-92017 56.08707 9.363007 0.71183 0.003 342.13 680 WP - G-4 01-09-2017 56.087037 9.324090 0.71183 0.003 142.13 680 WP - G-5 19-09-2017 56.087037 9.324090 0.71103 0.006 159.89 810 WP Storà river G-3 02-09-2017 56.053132 9.194030 0.71195 0.006 176.77 1410 WP - NP-4 31-08-2017 56.05518 9.139240 0.71101 0.031 9.42.13	Karup R at Bærs	KABA	13-02-2018	56.514108	8.982449	0.70944	0.119	8.44		WF
Groundwater+ KG-2 07-06-2018 56.219763 9.248550 0.71308 0.048 20.90 1180 WP Cludsted Plantage (Fig. SLC) - G-2b 02-09-2017 56.087317 9.363807 0.71138 0.003 342.13 660 WP - G-2b 02-09-2017 56.087075 9.363807 0.71183 0.003 342.13 660 WP - G-4 01-09-2017 56.085255 9.349334 0.71147 0.005 114.29 210 WP - G-5 19-09-2017 56.085255 9.349334 0.71147 0.005 114.29 210 WP Storå river G-3 02-09-2017 56.053104 9.197114 0.71097 0.01 93.04 1550 WP Hallund Brook NP-1 31-08-2017 56.053154 9.197114 0.71097 0.01 93.04 1550 WP - NP-4 31-08-2017 56.05135 9.189121 0.71142 0.037 27	Knudstrup (Pond)	K-7	29-10-2017	56.269251	9.312944	0.70804	0.045	22.35		CF
Groundwater* KG-3 07-06-2018 56.219763 9.248550 0.71308 0.054 18.60 190 WP 2. Gludsted Plantage (Fig. SLC) - G-2b 02-09-2017 56.087075 9.363807 0.71183 0.003 342.13 680 WP - G-2a 02-09-2017 56.087075 9.363807 0.71183 0.002 527.37 620 WP - G-4 01-09-2017 56.08507 9.363807 0.71183 0.002 527.37 620 WP - G-5 19-09-2017 56.08508 9.349434 0.71147 0.006 159.89 810 WP Storå river G-3 02-09-2017 56.05130 9.197114 0.71039 0.006 176.77 1410 WP - NP-2 31-08-2017 56.05135 9.198121 0.7114 0.037 27.13 440 WP - NP-3 01-08-2017 56.05135 9.189121 0.71112 0.035 15.34	Groundwater ⁺	KG-2	07-06-2018	56.231453	9.280806	0.71391	0.048	20.90	1180	WP
2. Gludsted Plantage (Fig. S1C) - G-2b 02-09-2017 S6.087317 9.363805 0.71183 0.003 342.13 680 WP - G-2a 02-09-2017 S6.087075 9.363065 0.71183 0.002 527.37 620 WP - G-4 01-09-2017 S6.087255 9.349334 0.71277 0.006 173.23 240 WP - G-5 19-09-2017 S6.087255 9.349334 0.71177 0.006 173.23 240 WP - G-5 19-09-2017 S6.087255 9.349334 0.71177 0.006 176.72 WP - G-5 19-09-2017 S6.087255 9.244616 0.70095 0.110 9.304 WP - G-3 02-09-2017 S6.05135 9.19714 0.71097 0.011 93.04 WP - NP-2 31-08-2017 S6.05135 9.189121 0.71142 0.005 153.4 WP - NP-3 03-10-2017 S6.051618 9.139240 0.7111 0.005 153.4 WF	Groundwater‡	KG-3	07-06-2018	56.219763	9.248550	0.71308	0.054	18.60	190	WP
- G-2b 02-09-2017 55.687317 9.363807 0.71183 0.003 342.13 680 WP - G-2a 02-09-2017 56.087075 9.363807 0.71183 0.005 73.23 240 WP - G-1 01-09-2017 56.086948 9.324797 0.7127 0.006 173.23 240 WP - G-5 19-09-2017 56.089903 9.32409 0.71039 0.006 179.89 810 WP Storå river G-3 02-09-2017 56.089903 9.324090 0.7109 0.011 9.04 1550 WP Jordend Plantage-Harrild Heath (Fig.SUD NP 31-08-2017 56.05232 9.194030 0.71195 0.011 9.04 WP - NP-3 01-08-2017 56.05232 9.194030 0.7119 0.037 27.13 440 WP - NP-3 01-08-2017 56.05232 9.194030 0.7119 0.035 WF WF	2. Gludsted Plantage (Fig	g. S1C)								
- G-2a 02-09-2017 56.087075 9.363065 0.71183 0.002 527.37 6.20 WP - G-4 01-09-2017 56.087048 9.354797 0.711277 0.006 173.23 240 WP - G-5 19-09-2017 56.085255 9.349390 0.71039 0.006 159.89 810 WP Storå river G-3 02-09-2017 56.01352 9.274616 0.70905 0.110 9.08 WF 3. Nørlund Plantage-Harrild H=trit (Fig.SUD NP-2 31-08-2017 56.053104 9.19714 0.71097 0.011 93.04 1550 WP - NP-3 01-08-2017 56.053135 9.189121 0.71142 0.037 27.13 440 WP - NP-4 31-08-2017 56.056118 9.139240 0.71114 0.037 27.13 440 WP - NP-4 31-08-2017 55.687061 9.16826 0.71121 0.035 15.3	-	G-2b	02-09-2017	56.087317	9.363807	0.71183	0.003	342.13	680	WP
- G-4 01-09-2017 56.086048 9.354797 0.71277 0.006 173.23 240 WP - G-1 01-09-2017 56.085255 9.349334 0.71147 0.009 114.29 210 WP Storå river G-3 02-09-2017 56.101352 9.274616 0.7095 0.110 9.08 WF 3. Nørlund Plantage-Harrild Heath (Fig. SLD NP-1 31-08-2017 56.051364 9.197114 0.71097 0.011 93.04 1550 WP - NP-1 31-08-2017 56.050135 9.189121 0.71147 0.006 176.77 1410 WP - NP-3 01-08-2017 56.050135 9.189121 0.7111 0.095 10.53 WF - NP-4 31-08-2017 56.050135 9.189121 0.7111 0.095 15.34 WF - NP-4 31-08-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP <td>-</td> <td>G-2a</td> <td>02-09-2017</td> <td>56.087075</td> <td>9.363065</td> <td>0.71183</td> <td>0.002</td> <td>527.37</td> <td>620</td> <td>WP</td>	-	G-2a	02-09-2017	56.087075	9.363065	0.71183	0.002	527.37	620	WP
- G-1 01-09-2017 56.085255 9.349334 0.71147 0.009 114.29 210 WP Storå river G-3 02-09-2017 56.089903 9.324909 0.71039 0.006 159.89 810 WP 3. Nørlund Plantage-Harrild Heath (Fig. S1) Hallund Brook NP-1 31-08-2017 56.053104 9.197114 0.71097 0.011 93.04 1550 WP - NP-2 31-08-2017 56.05315 9.194030 0.71195 0.006 176.77 1410 WP - NP-3 01-08-2017 56.05315 9.194030 0.71195 0.006 176.77 1410 WP - NP-3 01-08-2017 56.055138 9.199211 0.71114 0.037 27.13 440 WP - NP-5 03-10-2017 56.05518 9.139240 0.71011 0.095 10.53 WF Harrild Heath HAR1 19-09-2017 56.05518 9.139240 0.71011 0.095 15.34 WF 4. Frederikshåb Plantage (Fig. S1B) N. Voldborg Lake FPNS-1 03-10-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPNS-2 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.20 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP - FPNS-2 07-12-2017 55.685132 9.16373 0.71227 0.015 64.93 820 WP S. Voldborg Lake FPNS-1 15-08-2017 55.685132 9.16373 0.71218 0.017 57.31 820 WP - FPNS-2 07-12-2017 55.685132 9.16373 0.71218 0.017 57.31 820 WP - FPNS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP - FPS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP - FPS-2 07-12-2017 55.673064 9.232968 0.71419 0.025 41.1 550 WP - FPS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP - FPS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP - FPS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP - FHP-3 12-12-2017 55.674059 9.233284 0.71497 0.022 44.76 525 WP - FHP-3 12-12-2017 55.674059 9.167517 0.71079 0.002 425.14 620 WP - Hestdalen FPH-1 03-10-2017 55.674059 9.167517 0.71079 0.002 425.14 620 WP - HH-2 01-09-2017 55.674059 9.167517 0.71079 0.002 425.14 620 WP - HH-3 01-09-2017 55.67059 9.167517 0.71078 0.003 300.31 620 WP - HH-3 01-09-2017 55.67059 9.167517 0.71078 0.002 425.14 620 WP - RH-2 01-09-2017 55.67059 9.167517 0.71078 0.002 425.14 620 WP	-	G-4	01-09-2017	56.086048	9.354797	0.71277	0.006	173.23	240	WP
- G-5 19-09-2017 56.089903 9.324909 0.71039 0.006 159.89 810 WP Storå river G-3 02-09-2017 56.013152 9.274616 0.70905 0.110 9.08 WF 3. Nørlund Plantage-Harrild Heath (Fig. S1D/// 31-08-2017 56.053104 9.197114 0.71037 0.011 93.04 1550 WP - NP-2 31-08-2017 56.05232 9.194030 0.71142 0.037 27.13 440 WP - NP-3 01-08-2017 56.05518 9.139240 0.71012 0.037 27.13 440 WP - NP-4 31-08-2017 56.056118 9.139240 0.71012 0.037 27.13 440 WP - NP-4 31-08-2017 56.056118 9.139240 0.7011 0.037 27.13 440 WP - NP-4 31-08-2017 56.07661 9.161826 0.71219 0.025 40.20 550 WP	-	G-1	01-09-2017	56.085255	9.349334	0.71147	0.009	114.29	210	WP
Storå river G-3 02-09-2017 56.101352 9.274616 0.70905 0.110 9.08 WF 3. Nørlund Plantage-Harild Heath (Fig. STU) - NP-2 31-08-2017 56.053104 9.197114 0.71097 0.011 93.04 1550 WP - NP-2 31-08-2017 56.055135 9.189121 0.71142 0.037 27.13 440 WP - NP-3 01-08-2017 56.055135 9.189121 0.71142 0.037 27.13 440 WP - NP-4 31-08-2017 56.055105 9.189121 0.71142 0.037 27.13 440 WP - NP-4 31-08-2017 56.055135 9.183813 0.71138 0.005 15.34 WF Harrild Heath HAR1 19-09-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71229 0.025 40.11 50 <	-	G-5	19-09-2017	56.089903	9.324909	0.71039	0.006	159.89	810	WP
3. Nørlund Plantage-Harrild Heath (Fig. S1D! Hallund Brook NP-1 31-08-2017 56.053104 9.197114 0.71097 0.011 93.04 1550 WP - NP-2 31-08-2017 56.052532 9.194030 0.71195 0.006 176.77 1410 WP - NP-3 01-08-2017 56.051135 9.189121 0.71142 0.037 27.13 440 WP - NP-4 31-08-2017 56.055108 9.18921 0.71011 0.095 10.53 WF - NP-5 03-10-2017 56.055909 9.111094 0.70980 0.065 15.34 WF Harrild Heath HAR1 19-09-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPNS-1 03-10-2017 55.687061 9.161826 0.71129 0.025 40.20 550 WP - FPNS-1 03-10-2017 55.687041 9.161826 0.71219 0.025	Storå river	G-3	02-09-2017	56.101352	9.274616	0.70905	0.110	9.08		WF
Hallund Brook NP-1 31-08-2017 56.053104 9.197114 0.71097 0.011 93.04 1550 WP - NP-2 31-08-2017 56.052532 9.194030 0.71195 0.006 176.77 1410 WP - NP-3 01-08-2017 56.050135 9.189121 0.71142 0.037 27.13 440 WP - NP-4 31-08-2017 56.05135 9.183240 0.71011 0.095 10.53 WF - NP-5 03-10-2017 56.059590 9.111094 0.70980 0.065 15.34 WF Harrild Heath HAR1 19-09-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPNS-1 03-10-2017 55.687061 9.161826 0.7129 0.025 40.20 550 WP - FPNS-2 03-10-2017 55.687061 9.161826 0.7129 0.025 40.20 550 WP . - FPNS-2 07-12-2017 55.687061 9.161826 0.7129 0.025 <td>3. Nørlund Plantage-Har</td> <td>rild Heath (Fig. S</td> <td>\$1D)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	3. Nørlund Plantage-Har	rild Heath (Fig. S	\$1D)							
- NP-2 31-08-2017 56.052532 9.194030 0.71195 0.006 176.77 1410 WP - NP-3 01-08-2017 56.050135 9.189121 0.71142 0.037 27.13 440 WP - NP-4 31-08-2017 56.050135 9.189240 0.71011 0.095 10.53 WF - NP-5 03-10-2017 56.059590 9.111094 0.70980 0.065 15.34 WF Harrild Heath HAR1 19-09-2017 56.014125 9.183813 0.7138 0.005 197.40 880 WP 4. Frederikshåb Plantage (Fig. S1B) KP <td< td=""><td>Hallund Brook</td><td>NP-1</td><td>31-08-2017</td><td>56.053104</td><td>9.197114</td><td>0.71097</td><td>0.011</td><td>93.04</td><td>1550</td><td>WP</td></td<>	Hallund Brook	NP-1	31-08-2017	56.053104	9.197114	0.71097	0.011	93.04	1550	WP
- NP-3 01-08-2017 56.050135 9.189121 0.71142 0.037 27.13 440 WP - NP-4 31-08-2017 56.056118 9.189240 0.71011 0.095 10.53 WF - NP-5 03-10-2017 56.055590 9.11194 0.70980 0.065 15.34 WF Harrild Heath HAR 19-09-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPMS-1 03-10-2017 55.687061 9.161826 0.71129 0.025 40.20 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP - FPNS-3 03-10-2017 55.685132 9.163733 0.71220 0.015 64.93 820 WP Seven Year Lakes	-	NP-2	31-08-2017	56.052532	9.194030	0.71195	0.006	176.77	1410	WP
- NP-4 31-08-2017 56.056118 9.139240 0.71011 0.095 10.53 WF - NP-5 03-10-2017 56.059590 9.111094 0.70980 0.065 15.34 WF Harrild Heath HAR1 19-09-2017 56.014125 9.183813 0.71338 0.005 197.40 880 WP 4. Frederikshåb Plantage (Fig. S1B) - - FPNS-1 03-10-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71229 0.025 40.20 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 50 WP - FPNS-2 07-12-2017 55.68132 9.163733 0.71228 0.017 59.10 500	-	NP-3	01-08-2017	56.050135	9.189121	0.71142	0.037	27.13	440	WP
- NP-5 03-10-2017 56.059590 9.111094 0.70980 0.065 15.34 WF Harrild Heath HAR1 19-09-2017 56.014125 9.183813 0.71338 0.005 197.40 880 WP 4. Frederikshåb Plantage (Fig. S1B) 03-10-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPNS-2 03-10-2017 55.687061 9.161826 0.71219 0.025 40.20 550 WP - FPNS-3 03-10-2017 55.685132 9.161373 0.71227 0.015 64.93 820 WP - FPVS-2 07-12-2017 55.685132 9.163733 0.71218 0.017 55.11 820 WP - FPSS-1 15-08-2017 55.678481 9.176481 0.71362 0.017 59.10 500 WP - FPH-2 07-12-2017 55.674054 9.232968 0.71431 <	-	NP-4	31-08-2017	56.056118	9.139240	0.71011	0.095	10.53		WF
Harrild Heath HAR1 19-09-2017 56.014125 9.183813 0.71338 0.005 197.40 880 WP 4. Frederikshåb Plantage (Fig. S1B)	-	NP-5	03-10-2017	56.059590	9.111094	0.70980	0.065	15.34		WF
4. Frederikshab Plantage (Fig. S1B) N. Voldborg Lake FPNS-1 03-10-2017 55.687061 9.161826 0.71129 0.023 43.47 550 WP - FPNS-2 03-10-2017 55.687061 9.161826 0.71229 0.025 40.20 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP S. Voldborg Lake FPVS-1 15-08-2017 55.685132 9.163733 0.71218 0.017 57.31 820 WP Seven Year Lakes FPSS-1 15-08-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP - FPSS-2 07-12-2017 55.674149 9.224173 0.71431 0.009 113.37 710 WP - FPH-1 03-10-2017 55.674052 9.232968 0.71372 0.022 41.76 525 WP -<	Harrild Heath	HAR1	19-09-2017	56.014125	9.183813	0.71338	0.005	197.40	880	WP
N. Voldborg Lake FPNS-1 03-10-2017 55.687061 9.161826 0.71161 0.023 43.47 550 WP - FPNS-2 03-10-2017 55.687061 9.161826 0.71229 0.025 40.20 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP S. Voldborg Lake FPVS-1 15-08-2017 55.685132 9.163733 0.71227 0.015 64.93 820 WP - FPVS-2 07-12-2017 55.685132 9.163733 0.71218 0.017 57.31 820 WP Seven Year Lakes FPS-1 15-08-2017 55.678481 9.176481 0.71362 0.017 59.10 500 WP - FPS-2 07-12-2017 55.678481 9.176481 0.71431 0.009 113.37 710 WP - FPH-3 03-10-2017 55.674052 9.233284 0.71372 0.020 51.25	4. Frederikshab Plantage	e (Fig. S1B)	02 40 2047	55 607064	0.464036	0 74464	0.000	42.47	550	
- FPNS-2 03-10-2017 55.687061 9.161826 0.71229 0.025 40.20 550 WP - FPNS-3 03-10-2017 55.687061 9.161826 0.71219 0.025 40.11 550 WP S. Voldborg Lake FPVS-1 15-08-2017 55.685132 9.163733 0.71227 0.015 64.93 820 WP - FPVS-2 07-12-2017 55.685132 9.163733 0.71218 0.017 57.31 820 WP Seven Year Lakes FPSS-1 15-08-2017 55.678481 9.176481 0.71362 0.017 59.10 500 WP - FPSS-2 07-12-2017 55.678481 9.176481 0.7103 0.038 26.28 500 WP Hestdalen FPH-1 03-10-2017 55.673964 9.224173 0.71431 0.009 113.37 710 WP - FHP-3 12-12-2017 55.674052 9.232268 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - FHP-3 12-12-2017	N. VOIDDOrg Lake	FPINS-1	03-10-2017	55.687061	9.161826	0.71101	0.023	43.47	550	WP
- PPNS-3 03-10-2017 55.687/061 9.161826 0.71219 0.025 40.11 550 WP S. Voldborg Lake FPVS-1 15-08-2017 55.685132 9.163733 0.71227 0.015 64.93 820 WP - FPVS-2 07-12-2017 55.685132 9.163733 0.71218 0.017 57.31 820 WP Seven Year Lakes FPSS-1 15-08-2017 55.678481 9.176481 0.71362 0.017 59.10 500 WP - FPSS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP Hestdalen FPH-1 03-10-2017 55.674149 9.224173 0.71431 0.009 113.37 710 WP - FPH-2 07-12-2017 55.673964 9.232968 0.71495 0.020 51.25 575 WP - FHP-3 12-12-2017 55.674052 9.233284 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - FHP-3 12-12-2017	-	FPINS-2	03-10-2017	55.687061	9.161826	0.71229	0.025	40.20	550	WP
S. Voldborg Lake FPVS-1 15-08-2017 55.685132 9.163733 0.71227 0.015 64.93 820 WP - FPVS-2 07-12-2017 55.685132 9.163733 0.71218 0.017 57.31 820 WP Seven Year Lakes FPSS-1 15-08-2017 55.678481 9.176481 0.71362 0.017 59.10 500 WP - FPSS-2 07-12-2017 55.678481 9.176481 0.7103 0.038 26.28 500 WP Hestdalen FPH-1 03-10-2017 55.673964 9.224173 0.71431 0.009 113.37 710 WP - FPH-2 07-12-2017 55.673964 9.232968 0.71495 0.020 51.25 575 WP - FHP-3 12-12-2017 55.674052 9.233284 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - - RH-1 15-08-2017 55.670165 9.167517 0.71138 0.005 190.48 160 WP - RH-2a 07-	-	FPINS-3	03-10-2017	55.687061	9.161826	0.71219	0.025	40.11	550	WP
- FPVS-2 07-12-2017 55.685132 9.163733 0.71218 0.017 57.31 820 WP Seven Year Lakes FPSS-1 15-08-2017 55.678481 9.176481 0.71362 0.017 59.10 500 WP - FPSS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP Hestdalen FPH-1 03-10-2017 55.678481 9.176481 0.71431 0.009 113.37 710 WP - FPH-2 07-12-2017 55.673964 9.232968 0.71495 0.020 51.25 575 WP - FHP-3 12-12-2017 55.674052 9.23284 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - - FHP-3 12-12-2017 55.664033 9.150261 0.71138 0.005 190.48 160 WP - RH-1 15-08-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017	S. Voldborg Lake	FPVS-1	15-08-2017	55.685132	9.163733	0.71227	0.015	64.93	820	WP
Seven Year Lakes FPSS-1 15-08-2017 55.678481 9.176481 0.71362 0.017 59.10 500 WP - FPSS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP Hestdalen FPH-1 03-10-2017 55.678481 9.176481 0.71431 0.009 113.37 710 WP - FPH-2 07-12-2017 55.673964 9.232968 0.71495 0.020 51.25 575 WP - FHP-3 12-12-2017 55.674052 9.233284 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - - RH-1 15-08-2017 55.664033 9.150261 0.71138 0.005 190.48 160 WP - RH-2 01-09-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017 55.670549 9.167517 0.71078 0.003 </td <td>-</td> <td></td> <td>07-12-2017</td> <td>55.685132</td> <td>9.163733</td> <td>0.71218</td> <td>0.017</td> <td>57.31</td> <td>820</td> <td>WP</td>	-		07-12-2017	55.685132	9.163733	0.71218	0.017	57.31	820	WP
- FPSS-2 07-12-2017 55.678481 9.176481 0.71103 0.038 26.28 500 WP Hestdalen FPH-1 03-10-2017 55.674149 9.224173 0.71431 0.009 113.37 710 WP - FPH-2 07-12-2017 55.673964 9.232968 0.71495 0.020 51.25 575 WP - FHP-3 12-12-2017 55.674052 9.23284 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - - RH-1 15-08-2017 55.664033 9.150261 0.71138 0.005 190.48 160 WP - RH-2 01-09-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017 55.670549 9.167517 0.71078 0.003 300.31 620 WP - RH-3 01-09-2017 55.670549 9.167517 0.71078 0.003 300.31 620 WP - RH-4 03-10-2017 55.658232<	Seven Year Lakes	FP55-1	15-08-2017	55.078481	9.176481	0.71302	0.017	59.10	500	WP
Hestoalen FPF-1 03-10-2017 55.674149 9.224173 0.71431 0.009 113.37 710 WP - FPH-2 07-12-2017 55.673964 9.232968 0.71495 0.020 51.25 575 WP - FHP-3 12-12-2017 55.674052 9.233284 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - RH-1 15-08-2017 55.664033 9.150261 0.71138 0.005 190.48 160 WP - RH-2 01-09-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017 55.670569 9.167517 0.71078 0.003 300.31 620 WP - RH-2a 07-12.2017 55.670549 9.167517 0.71078 0.003 300.31 620 WP - RH-3 01-09-2017 55.670549 9.167251 0.71246 0.004 257.07 630 WP - RH-4 03-10-2017 55.658232 9	- Lleetdelee	FP55-2	07-12-2017	55.678481	9.176481	0.71103	0.038	20.28	500	WP
- PPR-2 07-12-2017 55.673664 9.232968 0.71495 0.020 51.25 575 WP - FHP-3 12-12-2017 55.674052 9.233284 0.71372 0.022 44.76 525 WP 5. Randbøl Heath (Fig. S1B) - RH-1 15-08-2017 55.664033 9.150261 0.71138 0.005 190.48 160 WP - RH-2 01-09-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017 55.670165 9.167517 0.71078 0.003 300.31 620 WP - RH-3 01-09-2017 55.670549 9.167517 0.71246 0.004 257.07 630 WP - RH-3 01-09-2017 55.658232 9.164567 0.71240 0.002 463.37 540 WP - RH-4 03-10-2017 55.663273 9.151096 0.71146 0.005 214.99 250 WP	Hestdalen		03-10-2017	55.074149	9.224173	0.71431	0.009	L13.37	710	WP
- PHP-S 12-12-2017 55.674052 5.25224 0.71372 0.022 44.76 523 WP 5. Randbøl Heath (Fig. S1B) - RH-1 15-08-2017 55.664033 9.150261 0.71138 0.005 190.48 160 WP - RH-2 01-09-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017 55.670165 9.167517 0.71078 0.003 300.31 620 WP - RH-2a 07-12.2017 55.670549 9.167517 0.71078 0.003 300.31 620 WP - RH-3 01-09-2017 55.670549 9.167251 0.71246 0.004 257.07 630 WP - RH-4 03-10-2017 55.658232 9.164567 0.71240 0.002 463.37 540 WP - RH-5 06-10.2017 55.663273 9.151096 0.71146 0.005 214.99 250 </td <td>-</td> <td></td> <td>07-12-2017</td> <td>55.073904</td> <td>9.232908</td> <td>0.71495</td> <td>0.020</td> <td>51.25</td> <td>575</td> <td>WP</td>	-		07-12-2017	55.073904	9.232908	0.71495	0.020	51.25	575	WP
- RH-1 15-08-2017 55.664033 9.150261 0.71138 0.005 190.48 160 WP - RH-2 01-09-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017 55.670165 9.167517 0.71078 0.003 300.31 620 WP - RH-2a 07-12.2017 55.670549 9.167517 0.71246 0.004 257.07 630 WP - RH-3 01-09-2017 55.658232 9.164567 0.71240 0.002 463.37 540 WP - RH-5 06-10.2017 55.663273 9.151096 0.71146 0.005 214.99 250 WP	-	FHP-3	12-12-2017	55.074052	9.233284	0./13/2	0.022	44.70	525	WP
- RH-1 15-08-2017 55.064055 9.150261 0.71138 0.005 190.48 160 WP - RH-2 01-09-2017 55.670165 9.167517 0.71079 0.002 426.14 620 WP - RH-2a 07-12.2017 55.670165 9.167517 0.71078 0.003 300.31 620 WP - RH-3 01-09-2017 55.670549 9.167251 0.71246 0.004 257.07 630 WP - RH-4 03-10-2017 55.658232 9.164567 0.71240 0.002 463.37 540 WP - RH-5 06-10.2017 55.663273 9.151096 0.71146 0.005 214.99 250 WP	5. Kanubøi Heath (Fig. S	DU 1	15.09 2017	55 664022	0 150261	0 71120	0.005	100 40	160	
- RH-2a 07-12.2017 55.670165 9.167517 0.71078 0.002 420.14 620 WP - RH-2a 07-12.2017 55.670165 9.167517 0.71078 0.003 300.31 620 WP - RH-3 01-09-2017 55.670549 9.167251 0.71246 0.004 257.07 630 WP - RH-4 03-10-2017 55.658232 9.164567 0.71240 0.002 463.37 540 WP - RH-5 06-10.2017 55.663273 9.151096 0.71146 0.005 214.99 250 WP	-	В⊓-J ИЦ-Т	13-08-2017	55 670165	9.130201	0.71130	0.005	120.40	620	\\/D
- RH-3 01-09-2017 55.670549 9.167251 0.71246 0.004 257.07 630 WP - RH-4 03-10-2017 55.658232 9.164567 0.71240 0.002 463.37 540 WP - RH-5 06-10.2017 55.658232 9.151096 0.71146 0.005 214.99 250 WP	-	nп-∠ ₽µ_Ээ	01-03-2017	55 670165	9.10/91/	0.71079	0.002	300 21	620	\\/D
- RH-4 03-10-2017 55.658232 9.164567 0.71240 0.004 257.07 630 WP - RH-5 06-10.2017 55.658232 9.151096 0.71146 0.005 214.99 250 WP	-	рц_2	07-12.2017	55 670540	9.167251	0.71076	0.003	257.07	620	
- RH-5 06-10.2017 55.663273 9.151096 0.71240 0.002 403.57 540 WP	-	RH-N	01-03-2017	55 658222	9 16/567	0.71240	0.004	462.27	540	\\/D
	-	RH-5	06-10.2017	55.663273	9.151096	0.71146	0.002	214.99	250	WP

-	RH-6	11-02-2018	55.655292	9.134861	0.71278	0.009	108.02	530	WP
Slauggård Plantage	SLA-1	11-02-2018	55.641518	9.118307	0.71210	0.004	229.93	480	WP
6. Hærvejen (Fig. S1B)									
-	HÆR-1	06-10-2017	55.645679	9.21044	0.71110	0.004	236.38	180	СР
Raised Bog	HÆR-2	09-01-2018	55.645222	9.213184	0.70952	0.016	61.17	320	СР
-	OEL-1	09-01-2018	55.634112	9.235347	0.71156	0.019	51.45	260	СР
Natural spring	OEL-3	09-01-2018	55.632508	9.233643	0.71191	0.064	15.74	170	СР
	FIT-1	07-12-2017	55.620457	9.160824	0.70929	0.087	11.50		WF
7 Gyttegård Plantage (Fig	\$1F)	0, 12 201,	551620157	5120002	0.00020	01007	11.00		
-	GVT-2	07-12-2017	55 7287/2	9 028517	0 71/8/	0.016	62 97	350	\\/D
9 Boutoft Plantago (Fig. S	11)	07-12-2017	55.720742	5.020517	0.71404	0.010	02.57	330	VVF
o. Devioit Flantage (Fig. 5.		0 2 10 2017		0 242072	0 71147	0.020	25.05	400	
-	DEV-1	0-3-10-2017	55.205788	9.242075	0.71147	0.029	101 70	400	WP
-	BEV-2	03-10-2017	55.203302	9.245468	0.71414	0.010	101.70	180	WP
-	BEV-2a	12-12-2017	55.203302	9.245468	0.71414	0.010	97.79	180	WP
-	BEV-3	03-10-2017	55.210800	9.261471	0.70977	0.133	7.54		WF
9. Ruggård Plantage (Fig, S	51G)								
-	RUG-1	12-12-2017	55.114907	9.317624	0.71115	0.006	179.55	350	WP
10. Sepstrup Sande-Salten	River (Fig. S1	.F)							
-	SEPS-2	29-10-2017	56.087291	9.400274	0.71356	0.005	186.81	590	СР
-	SEPS 1	19-09-2017	56.082517	9.422146	0.71239	0.028	35.11	1030	СР
Salten River	SEPS-3	29-10-2017	56.056101	9.458571	0.70918	0.089	11.18		CF
11. Addit									
-	ADD-1	01-01-2018	56.059889	9.644173	0.71075	0.001	694.57	620	СР
Natural spring	ADD-3	01-01-2018	56.056287	9.617739	0.71011	0.051	19.63	310	CP
12 Veile Å (Eig. S1B)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	01 01 2010	50.050207	51027700	0.0.2022	01001	10100	010	0.
Rosdam spring	RD-1	06-10 2017	55 658601	9 2/18123	0 20030	0.084	11 0/	450	CP
Voilo Pivor		00-10.2017	55.058091	9.240123	0.70930	0.004	£ 02	430	CF
	VL-1	07-12-2017	55.050357	9.307432	0.70890	0.140	0.85		CI
13. Egived (Fig. SIH)	F.C.C. 1	00 01 2010		0 210741	0 71120	0.000	105 71	200	CD
Fugisang Forest	EGS-1	09-01-2018	55.596524	9.310741	0.71139	0.009	105.71	300	CP
Egtved Forest	EGS-2a	11-02-2018	55.596003	9.291486	0./11/5	0.023	42.85	210	СР
Bølling Stream	BOE-1	11-02-2018	55.585392	9.344317	0.70945	0.133	7.51		CF
	-								
14. Mejsling Forest (Fig. S	L)								
14. Mejsling Forest (Fig. Si	L) MEJ-1	11-02-2018	55.634461	9.454002	0.71300	0.019	51.65	250	СР
14. Mejsling Forest (Fig. S - 15. Othillias Spring, Filleru	L) MEJ-1 P	11-02-2018	55.634461	9.454002	0.71300	0.019	51.65	250	СР
14. Mejsling Forest (Fig. S: - 15. Othillias Spring, Filleru -	l) MEJ-1 P OTH-1	11-02-2018 10-11-2017	55.634461 55.963641	9.454002 10.119033	0.71300	0.019	51.65 4.31	250	CP EF
14. Mejsling Forest (Fig. S - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K)	L) MEJ-1 P OTH-1	11-02-2018 10-11-2017	55.634461 55.963641	9.454002 10.119033	0.71300 0.70936	0.019	51.65 4.31	250	CP EF
14. Mejsling Forest (Fig. S: - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream	L) MEJ-1 P OTH-1 LER-1	11-02-2018 10-11-2017 08-10-2017	55.634461 55.963641 55.678270	9.454002 10.119033 9.806090	0.71300 0.70936 0.70917	0.019 0.232 0.303	51.65 4.31 3.31	250	CP EF EP
14. Mejsling Forest (Fig. S: - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River	L) MEJ-1 P OTH-1 LER-1 ROS-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017	55.634461 55.963641 55.678270 55.678064	9.454002 10.119033 9.806090 9.808310	0.71300 0.70936 0.70917 0.70908	0.019 0.232 0.303 0.400	51.65 4.31 3.31 2.50	250 380	CP EF EP EF
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L)	L) MEJ-1 P OTH-1 LER-1 ROS-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017	55.634461 55.963641 55.678270 55.678064	9.454002 10.119033 9.806090 9.808310	0.71300 0.70936 0.70917 0.70908	0.019 0.232 0.303 0.400	51.65 4.31 3.31 2.50	250 380	CP EF EP EF
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L)	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047	9.454002 10.119033 9.806090 9.808310 9.836078	0.71300 0.70936 0.70917 0.70908 0.70847	0.019 0.232 0.303 0.400	51.65 4.31 3.31 2.50 3.10	250 380 400	CP EF EP EF
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L)	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897	0.019 0.232 0.303 0.400 0.323 0.270	51.65 4.31 3.31 2.50 3.10 3.70	250 380 400 850	CP EF EP EF EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) -	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70897	0.019 0.232 0.303 0.400 0.323 0.270 0.316	51.65 4.31 3.31 2.50 3.10 3.70 3.16	250 380 400 850 500	CP EF EP EF EP EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - - 18. Stenderun (Fig. S1M)	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869	0.019 0.232 0.303 0.400 0.323 0.270 0.316	51.65 4.31 3.31 2.50 3.10 3.70 3.16	250 380 400 850 500	CP EF EP EF EP EP EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869	0.019 0.232 0.303 0.400 0.323 0.270 0.316	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10	250 380 400 850 500	CP EF EP EF EP EP EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649927	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70944 0.70944	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.21	250 380 400 850 500 400	CP EF EP EF EP EP EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - - - - - - - - - - - - -	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SN-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.484884	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 0.627934	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70944 0.70949 0.70950	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.232	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.24	250 380 400 850 500 400 850	CP EF EP EF EP EP EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-1 SN-2 SOL-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70944 0.70949 0.70959	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34	250 380 400 850 500 400 850	CP EF EP EF EP EP EP EP EP EF
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17. Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 11)	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70944 0.70949 0.70959	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34	250 380 400 850 500 400 850	CP EF EP EF EP EP EP EP EF
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 11) PS-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96	250 380 400 850 500 400 850 500	CP EF EP EP EP EP EP EP EF EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook	I) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 II) PS-1 PS-2	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 03-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94	250 380 400 850 500 400 850 500	CP EF EP EP EP EP EP EP EF EF
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 LI) PS-1 PS-2 PS-3	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 03-10-2017 12-12-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13	250 380 400 850 500 400 850 500 360	CP EF EP EP EP EP EP EP EF EF EP EF EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 1) PS-1 PS-2 PS-3 PS-4	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 03-10-2017 12-12-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067 55.217326	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.70949 0.71016	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07	250 380 400 850 500 400 850 500 360 425	CP EF EP EP EP EP EP EF EF EF EP EF EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 LER-1 PS-1 PS-2 PS-3 PS-4	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 03-10-2017 12-12-2017 12-12-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067 55.217326	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70944 0.70949 0.70959 0.70886 0.70953 0.70949 0.70949 0.70917	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07	250 380 400 850 500 400 850 500 360 425	CP EF EP EP EP EP EP EF EF EF EP EF EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel Hytterkobbel Forest	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 LI) PS-1 PS-2 PS-3 PS-4 HYT-1	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 03-10-2017 12-12-2017 12-12-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067 55.217326 55.161993	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244 9.406865	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EF EP EF EP EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17. Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel Hytterkobbel Forest Reference samples	 MEJ-1 MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 II) PS-1 PS-2 PS-3 PS-4 HYT-1 	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 03-10-2017 12-12-2017 12-12-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067 55.217326 55.161993	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244 9.406865	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EF EP EF EP EP EP
14. Mejsling Forest (Fig. S: - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17. Trelde Næs (Fig. S1L) 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel Hytterkobbel Forest Reference samples Rainwater, Odder	 MEJ-1 MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 II) PS-1 PS-2 PS-3 PS-4 HYT-1 	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 03-10-2017 12-12-2017 12-12-2017 12-12-2017 10-04-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067 55.217326 55.161993 55.972679	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244 9.406865 10.145713	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042 0.708	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057 0.00008	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52 12177	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EF EP EF EP EP EP
14. Mejsling Forest (Fig. S2 - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel Hytterkobbel Forest Reference samples Rainwater, Odder Holocene Foraminifera., O	<pre>t) MEJ-1 MEJ-1 p OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 10 PS-1 PS-2 PS-3 PS-4 HYT-1 kinawa</pre>	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 12-12-2017 12-12-2017 12-12-2017 10-04-2017 17-10-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067 55.217326 55.161993 55.972679	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244 9.406865 10.145713	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042 0.708 0.70918	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057 0.00008	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52 12177	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EF EP EF EP EP EP
14. Mejsling Forest (Fig. S. - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel Hytterkobbel Forest Reference samples Rainwater, Odder Holocene Foraminifera., O Holocene Foraminifera., O	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 11) PS-1 PS-2 PS-3 PS-4 HYT-1 kinawa kinawa	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 12-12-2017 12-12-2017 10-04-2017 17-10-2018	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229067 55.217326 55.161993 55.972679	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244 9.406865 10.145713	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042 0.708 0.70918 0.70918	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057 0.00008	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52 12177	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EF EP EF EP EP EP
14. Mejsling Forest (Fig. S. - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel Hytterkobbel Forest Reference samples Rainwater, Odder Holocene Foraminifera., O Holocene Foraminifera., O	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 11) PS-1 PS-2 PS-3 PS-4 HYT-1 kinawa kinawa kinawa	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 12-12-2017 12-12-2017 12-12-2017 10-04-2017 17-10-2018 16-01-2018	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229984 55.229067 55.217326 55.161993 55.972679	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.647834 9.436083 9.437467 9.387822 9.402244 9.406865 10.145713	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042 0.708 0.70918 0.70918 0.70918 0.70918	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057 0.00008	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52 12177	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EP EF EP EP EP EP
14. Mejsling Forest (Fig. S. 15. Othillias Spring, Filleru 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17.Trelde Næs (Fig. S1L) - - 18. Stenderup (Fig. S1M) Stenderup Nørre Forest - Solkær River 19. Pamhule Forest (Fig. S Sophies Spring Usholt Brook Pond Pond 20. Hytterkobbel Hytterkobbel Forest Reference samples Rainwater, Odder Holocene Foraminifera., O Holocene Foraminifera., O Holocene Foraminifera., O Holocene Foraminifera., O	L) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 10 PS-1 PS-2 PS-3 PS-4 HYT-1 kinawa kinawa kinawa kinawa kinawa	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 12-12-2017 12-12-2017 12-12-2017 10-04-2017 17-10-2018 16-01-2018 28-09-2017	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.484884 55.459499 55.229121 55.229984 55.229984 55.229067 55.217326 55.161993 55.972679	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244 9.406865 10.145713	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042 0.708 0.70918 0.70918 0.70918 0.70918 0.70918 0.70918 0.70917	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057 0.00008	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52 12177	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EP EF EP EP EP EP
14. Mejsling Forest (Fig. S. - 15. Othillias Spring, Filleru - 16. Vejle Fjord Fig. S1K) Lerbæk stream Rosenvold River 17. Trelde Næs (Fig. S1L)	I) MEJ-1 P OTH-1 LER-1 ROS-1 TN-1 TN-2 TN-3 SN-1 SN-2 SOL-1 II) PS-1 PS-2 PS-3 PS-4 HYT-1 kinawa kinawa kinawa kinawa	11-02-2018 10-11-2017 08-10-2017 08-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 16-10-2017 03-10-2017 12-12-2017 12-12-2017 12-12-2017 10-04-2017 17-10-2018 16-01-2018 28-09-2017 28-02-2018	55.634461 55.963641 55.678270 55.678064 55.620047 55.608214 55.610126 55.489128 55.489128 55.484884 55.459499 55.229121 55.229984 55.229984 55.229067 55.217326 55.161993 55.972679	9.454002 10.119033 9.806090 9.808310 9.836078 9.823985 9.825847 9.6444371 9.649937 9.607834 9.436083 9.437467 9.387822 9.402244 9.406865 10.145713	0.71300 0.70936 0.70917 0.70908 0.70847 0.70897 0.70869 0.70949 0.70949 0.70959 0.70886 0.70953 0.70949 0.71016 0.71042 0.708 0.70918 0.70918 0.70918 0.70918 0.70918	0.019 0.232 0.303 0.400 0.323 0.270 0.316 0.196 0.232 0.230 0.338 0.168 0.163 0.062 0.057 0.00008	51.65 4.31 3.31 2.50 3.10 3.70 3.16 5.10 4.31 4.34 2.96 5.94 6.13 16.07 17.52 12177	250 380 400 850 500 400 850 500 360 425 390	CP EF EP EP EP EP EP EF EP EF EP EP EP
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		Stront	ium isotopic comp	osition			
	West	Jutland	Centra	Jutland	East Jutland		
	Pristine	Farmland	Pristine	Farmland	Pristine	Farmland	
Number	37	15	12	4	10	4	
Minimum	0.70905	0.70905	0.70930	0.70804	0.70847	0.70908	
Maximum	0.71495	0.71099	0.71356	0.70945	0.71042	0.70959	
Mean	0.71231	0.70972	0.71136	0.70890	0.70931	0.70939	
Stand. Dev.	0.00130	0.00043	0.00130	0.00061	0.00062	0.00022	

Table S2. Basic statistical data on strontium isotopic composition (⁸⁷Sr/⁸⁶Sr) and strontium concentration of pristine and farmland samples from West, Central and East Jutland.

Strontium concentration							
	West	Jutland	Centra	l Jutland	East Jutland		
	Pristine	Farmland	Pristine	Farmland	Pristine	Farmland	
Number	37	15	12	4	10	4	
Minimum	0.002	0.048	0.001	0.045	0.057	0.168	
Maximum	0.110	0.133	0.084	0.146	0.338	0.400	
Mean	0.015	0.096	0.027	0.103	0.226	0.258	
Stand. Dev.	0.019	0.023	0.026	0.046	0.104	0.010	

Table S3. Strontium composition of lime products, fertilizers and animal feed.

Product	⁸⁷ Sr/ ⁸⁶ Sr	Sr conc. (ppm)
Lime and lime products		
Chalk, Dania (U. Maastrichtian) Chalk Gudumholm (U.	0.70784	797
Maastrichtian)	0.70786	1055
Mag. Limestone, England (Permian)	0.70753	58
2.5 % Mg-Chalk, Dankalk, Aggersund	0.70785	599
Fertilizers (chemical)		
NS 27-4	0.70741	214
NP 20-9	0.70344	38.4
Kali 49	0.71475	7.3
Fertilizer (organic) (AKK)		
Protamylasse (potato-based)	0.70773	0.1
Local plant production		
Maize	0.70821	11.3
Rolled Barley	0.70769	4.8
Barley, whole	0.70773	22.3
Concentrated feed (Import)	0.70973	34.5
Imported animal feed		
Soy meal Argentina A, (dlg)	0.70730	18.6
Soy meal Argentina B, (dlg)	0.70722	21.8
Other soy products		
Soy bean China A	0.70994	7.1
Soy bean China B	0.71012	5.1
Soy Austria A	0.71227	3.7
Soy Austria B	0.71230	3.9

Farm 1 - 80 hectares					
Component	kg/ha/year	Sr (ppm)	g Sr/ha/year	⁸⁷ Sr/ ⁸⁶ Sr	% of total Sr
NS 27-4 (Fertilizer)	450	214	96.3	0.70741	10.7
Kali 49 (Fertilizer)	90	7.3	0.7	0.71475	0.1
Agricultural Lime	1000	800	800	0.70785	89.2
Total			897	0.70781	
Farm 2 - 100 hectares					
Component	kg/ha/year	Sr (ppm)	g Sr/ha/year	⁸⁷ Sr/ ⁸⁶ Sr	% of total Sr
NP 20-9	50	38.4	1.9	0.70344	0.3
NS 27-4	130	214	27.8	0.70741	3.7
Kali 49	66	7.3	0.5	0.71475	0.1
Protamylasse (K fertilizer)	2000	0.1	0.2	0.70773	0.0
Manure	35000	2.2	76.9	0.70829	10.3
Agricultural Lime	800	800	640	0.70785	85.6
Total			747	0.70787	
Manure	⁸⁷ Sr/ ⁸⁶ Sr	Sr (ppm)	kg/day/cow	g Sr/day/cow	% of total Sr
Rolled Barley	0.70769	4.8	11	0.05	13.9
Whole Cut Grass	0.70773	22.3	11	0.24	64.1
Soy Pellets	0.70973	34.5	2	0.07	18.0
Water	0.71300	0.1	150	0.02	3.9
Average Manure	0.70829	2.20	174	0.382	

Table S4. Calculated strontium isotope composition and concentration for two representative farms in the Vallerbæk area, and for the strontium composition of manure.





fig. S1. Supplementary text.

The glacial deposits of the study area are subdivided into three geological zones, termed West, Central and East (fig. S2). One of the most important differences between the three zones is the content of calcium carbonate. Calcium carbonate in surface deposits is often dissolved due to leaching. However, the thickness of the leached zone varies. It is thickest in West and Central Jutland and thinnest in East Jutland (*18*), but the thickness of the non-calcareous zone is poorly known. The tills of East Jutland are clearly more calcareous than the deposits of West and Central Jutland. In 5*5 km grid investigation, 3% and 5% of the samples from West and Central Jutland, respectively, contained calcium carbonate, compared to 50% of the samples from East Jutland (*44*).

To compliment these rough estimates, we have examined the thickness of the non-calcareous zone in an east-west profile south of the Vejle Tunnel Valley from the tills of East Jutland to outwash plain of West Jutland (fig. S2). The cross-section passes through the most densely sampled part of the study area. The results clearly confirm previous estimates. In West Jutland, the thickness of the non-calcareous zone increases from about 15 m closest to the Main Stationary Line to more than 50 m about 15 km west of the line. In Central Jutland, the thickness of the non/calcareous zone varies between 2.5 and 16 m with an average thickness around 7 m. In East Jutland, the thickness varies between zero and 2-3 m.



Fig. S2, part 1. Simplified maps of localities showing sample position and strontium data.

The geographic location of localities is indicated in Fig.1B. The geographic coordinates, sampling date, and strontium data are given in table S1. For each sample, the ⁸⁷Sr/⁸⁶Sr ratio and the strontium concentration is indicated. Pristine samples are in black lettering; farmland samples are in blue lettering. Groundwater samples from pristine areas are in dark purple lettering (see fig. S1A). Maps are based on data from "Styrelsen for Dataforsyning og Effektivisering, skærmkortet, WMS-tjeneste".



Fig. S2, part 2. Simplified maps of localities showing sample position and strontium data. For explanation see text to fig. S2, part 1.

Description of localities.

Locality 1, Kompedal Plantage-Karup River (fig. S1A). An overview of the locality is presented main text Fig. 3. Here only the tributary Vallerbæk stream is shown. The locality is situated on the Karup Outwash Plain (Fig. 3). Vallerbæk stream flows in an approximately 150 m wide and up to 8 m deep erosional valley cut into the outwash plain during the deglaciation and Holocene. The uppermost 4 km of the stream runs within Kompedal Plantage and is classified as pristine. This part of the stream is tiny and often discontinuous at the surface. Sample K-7 was taken in a pond on farmland about 4 km NE of the forest and is hydrologically connected eastward to the Gudenå River system.

Locality 2, Gludsted Plantage (fig. S1C); locality 10, Sepstrup Sande (fig. S1F). Gludsted Plantage is located on the outwash plain in front of the tunnel valley at Sepstrup Sande (Loc. 10). The outwash plain and the tunnel valley are separated by the Main Stationary Line (MSL) (see main text). The streams on the outwash plain flows westward, while the streams at Sepstrup Sande flows eastward. The stream

running through Gludsted Plantage constitutes the beginning of Storå River. Within the forest, it is generally not continuous at the surface. Samples G-1 to G-5 were collected from pristine areas. Sample G-4 is from farmland 2 km east of the forest. Sample SADS-1 and 2 from the Sepstrup Sande tunnel valley are from pristine areas; SADS-3 is influenced by farming.

Locality 3, Nørlund Plantage (fig. S1D). Samples NP-1-NP-3 were collected on Nørlund "Hill Island" in the spring area of Hallund Brook, a tributary to the Skjern Å River. The upper part of the brook runs in a shallow meadow surrounded by coniferous forests. Samples NP-4 and NP-5 were collected from farmland on the outwash plain 1.7 km and 5 km, respectively, west of the forest. Sample HAR-1 is from Harrild Heath on the outwash plain south of Nørlund Hill Island. This pristine sample was collected from a side branch of Kvinde Brook.

Locality 4, Frederikshåb Plantage; Locality 5, Randbøl Heath; Locality 6, Hærvejen (fig. S1B). These localities are all located on the Grindsted outwash plain west of Vejle Tunnel Valley. The samples from Frederikshåb Plantage and Hestdalen were collected in a series of small lakes and ponds located in a shallow erosional valley cut into the outwash plain probably by meltwater from the tunnel valley. The lakes from Frederikshåb Plantage show highly variable water levels and they doubled in size during the fall of 2017. The samples from the very flat Randbøl Hede and Slauggard Plantage outwash plains were collected in ponds and small lakes of unknown origin. None of the samples from localities 4 and 5 are considered to have been affected by farming. The samples from Hærvejen have various origins including a natural spring and a raised bog (see table T1). Two samples (marked with red numbering in fig. S1B are affected by farm land. The remaining samples are from pristine water.

Locality 7, Gyttegård Plantage (fig. S1E). The pristine sample was collected in an elongate pond completely surrounded by forest.

Locality 8, Bevtoft Plantage (fig. S1J). The locality is situated on the outwash plain separating Gram and the Toftlund "Hill Islands" about 3 km east of the MSL and about 4 km southwest of the Bronze-age burial mound of the Skrydstrup Woman. Samples BEV-1 and BEV-2 were collected from two pristine ponds within the forest. However, the surroundings of BEV-1 are cleared for trees and are maintained with grass cutting machines and the pond may be contaminated. BEV-3 was sampled from an abandoned water-filled gravel pit located on farm land about 500 m east of the forest.

Locality 9, Ruggård (fig. S1G). The pristine sample was collected in a circular pond in the northern part of the forest.

Locality 10, see locality 2.

Localities 12, Vejle Tunnel Valley (Fig. S1B); Locality 13, Egtved (fig. S1H). Sample ROS-1 is from a natural spring situated at the end of the Vejle Tunnel Valley about 35 vertical meters below the outwash plain. It is classified as pristine. Sample VE-1 is from Vejle Å River and clearly affected by farming. The two samples from Fuglsang Forest and Egtved Forest are pristine, whereas the water sample from Bølling Brook is influenced by farming.

Localities 16, Vejle Fjord (fig. S1K); Locality 17, Trelde Næs (fig. S1L); Locality 18. Sønder Stenderup (fig. S1M) and Locality 19, Pamhule Forest (fig. S1I). Locality 20, Hytterkobbel. These localities are all located in areas dominated by the calcareous, clayey East Jutland Till (Fig.1A,B). Samples were collected from brooks and streams except for the sample from Hytterkobbel and the three pristine samples from Pamhule Forest (PS-1, PS-2 and PS-3), which were taken from small ponds and a spring.



Fig. S3. Influence of soil thickness and soil composition on the level of disturbance of the ⁸⁷Sr/⁸⁶Sr **ratio from agricultural Lime.** (A). The change in ⁸⁷Sr/⁸⁶Sr ratio as a function of how much of total strontium in a surface water sample is coming from agricultural lime (B). These calculations should be used as rough guidelines only as the Sr concentration in natural and agricultural lime and soil may vary, as may the Sr isotopic composition of agricultural lime used in different places.

fig. S3. Supplementary text.

How strongly the strontium isotopic composition of surface water is influenced by the use of agricultural lime is dependent on how much strontium there is in the soil, the isotopic composition of the soil and the thickness of the soil that the agricultural lime and rainwater effectively interact with. In fig. S3A, a simple estimate of the amount of the total Sr is coming from agricultural lime is given, based on how much calcium carbonate (or equivalent of other easily leachable source of Sr) is naturally in the soil, the thickness of the soil column the agricultural water is percolating through, and an average liming rate. For soils with less than 1% CaCO₃, the total amount of Sr coming from agricultural lime is around 1% or more. In fig. S3B a calculation of how much the Sr isotopic ratio shifts as function of the amount of agricultural lime and the natural Sr isotopic ratio is presented. The further the natural Sr isotopic ratio is from that of the agricultural lime (in this example a mid-Cretaceous limestone with ⁸⁷Sr/⁸⁶Sr = 0.7078 is used), the more it will be influenced by the agricultural lime. At a level of 1% Sr from agricultural lime the resulting shift in Sr isotopic composition is resolvable for all lithologies not dominated by carbonates and for areas with crustal signatures with high ⁸⁷Sr/⁸⁶Sr ratios very small amounts of agricultural lime will severely alter the strontium isotopic composition of surface water.



Fig. S4. Comparison of strontium concentrations measured by quadrupole ICP-MS and multicollector ICP-MS. Twelve samples were analyzed for their strontium concentration by both quadrupole ICP-MS (Agilent 7900) and standard-sample-bracketing multi-collector ICP-MS (Nu Plasma II). The results from the two methods are in good agreement, and suggests that the standardsample-bracketing multi-collector give accurate results. An uncertainty of 5% is assigned to the Sr concentration data of the entire sample set measured by standard-sample-bracketing multi-collector ICP-MS, based on the reproducibility of standards.