## Navigating Early Medieval Europe

The Rural Riches Database Manual

Appendix 1a: Beads, general

Information related to recording beads (techniques, dating, types, colours, decorations, etc.)

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In this appendix you find some documents which are of help when recording beads.
The following documents are provided:

1. an illustration with beads made in various techniques.
2. two tables concerning the chronology of beads. One on the chronology as established by Pion and one with a comparison of bead types in various typo-chronologies of beads (Mette Langbroek).
3. a sheet with the type of beads that have to be recorded in the Bead Counts form of the site form of the database. We collect data on these beads on every site. When not present record 'none' in every field of the bead counts form. It is important to record explicitly the absence of specific bead types in the excavated material.
4. a sheet indicating the various shades (Light, Middle, Dark) of the colours Red, Yellow, Orange, Purple, Green, Green-Blue, Blue, Blue-green) as well as examples of Amber, White, Black, Silver, Gold and Colourless beads.
5. a sheet with examples of various types of decoration to be recorded for beads.
6. a sheet with various forms of beads.
7. a chart to determine the Leiden type of monochrome beads

Appendix 1b: a document showing the typology of beads by Pion/Vrielynck/Mathis.
Appendix 1c: a document showing the typology of polychrome beads by U. Koch
Appendix 1d: a document showing the typology and 'Perlenkombinationsgruppen' by F. Siegmund.
Appendix 1e: a document with the bead types of the Franken AG.

1. Beads made in various techniques

## 2a Chronology scheme Pion/Vrielynck/Mathis

| Periode | Legoux/Périn/Vallet 2004 | Calender years (approximation) |
| :--- | :--- | :--- |
| Po | PM | $440-480$ |
| $P_{1}$ | $M A_{1}$ | $480-530$ |
| $P_{2}$ | $M A_{2}$ | $530-570$ |
| $P_{3}$ | $M A_{3}$ | $560-610$ |
| $P_{4}$ | $M R_{1}$ | $600-640$ |
| $P_{5}$ | $M R_{1} / M R_{2}$ | $620-670$ |

In the near future a Period P6 might be defined which corresponds with MR3 (660-710) (Langbroek 2023).
$P$ ? means that it is not possible to assign a Pion phase.
X/ not applicable means that the object looks like a bead but is actually not a bead.

2b Comparative chronology scheme by Langbroek (2023)

|  | Pion <br> Belgium |  | Sasse \& Theune Southem Germany |  | Koch/Stauch Southern Germany |  | Franken AG German Rhineland |  |  | Siegmund Nordrhein-Westfalen |  |  |  | Brugmann England |  |  | Hines \& Bayliss England |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 450 |  |  |  |  |  |  |  |  |  | B |  |  |  |  |  |  |  |  |
| 460 |  |  |  | A |  |  | 1 | II |  | B |  |  |  | A1 |  |  |  |  |
| 470 |  |  |  | A |  |  | 1 | II |  | B |  |  |  | A1 |  |  |  |  |
| 480 |  |  |  | A |  |  | 1 | II |  | B |  |  |  | A1 |  |  |  |  |
| 490 | $P_{1}$ <br> $\mathrm{P}_{1}$ <br> $P_{1}$ <br> $P_{1}$ <br> $P_{1}$ |  |  | A | A |  | 1 | II |  | A/B |  |  |  | A1 | $A_{2}$ |  |  |  |
| 500 |  |  | B |  | A |  | 1 | II |  | A/B | C | D |  | A1 | $A_{2}$ |  |  |  |
| 510 |  |  | B |  | A |  | 1 | II | III | A/B | C | D |  | A1 | $A_{2}$ |  |  |  |
| 520 |  |  | B |  | A |  | 1 | II | III | A/B | C | D |  | A1 | $A_{2}$ |  |  |  |
| 530 |  |  | B |  | A |  |  | II | III | A/B | C | D |  | A1 | $A_{2}$ |  | 3 |  |
| 540 |  |  |  | C |  | B |  | II | III | A/B | C | D | E |  | $A_{2}$ | A2b | a |  |
| 550 |  |  |  | C |  | B |  | II | III | A/B | C | D | E |  | $A_{2}$ | A2b | a |  |
| 560 |  |  |  | C |  | B |  |  | III | B | F | D | E |  | $A_{2}$ | A2b | a | b |
| 570 |  |  |  | C |  | $\mathrm{C}_{1}$ |  |  | III | B | $F$ | D | E | $B_{1}$ | $A_{2}$ | A2b | a | b |
| 580 | $\begin{aligned} & P_{3} \\ & P_{3} \\ & P_{3} \\ & P_{3} \end{aligned}$ |  | D |  |  | $\mathrm{C}_{1}$ |  |  | III | B | F | D | E | $\mathrm{B}_{1}$ | $A_{2}$ | A2b | a | b |
| 590 |  |  | D |  | $\mathrm{C}_{2}$ |  | IV |  | III | G | F | D | E | $\mathrm{B}_{1}$ | $\mathrm{B}_{2}$ |  |  | b |
| 600 |  |  | D |  | $\mathrm{C}_{2}$ |  | IV |  |  | G | F |  | E | $\mathrm{B}_{1}$ | $\mathrm{B}_{2}$ |  |  | b |
| 610 |  | P4 | D | E | D |  | IV |  |  | G | F |  | E |  | $\mathrm{B}_{2}$ |  | c | b |
| 620 |  |  |  | E | D |  | IV |  |  | G | F | H | I |  | $\mathrm{B}_{2}$ |  | c | b |
| 630 | $\begin{aligned} & P_{5} \\ & P_{5} \\ & P_{5} \\ & P_{5} \\ & P_{5} \end{aligned}$ | $\begin{aligned} & \mathrm{P}_{4} \\ & \mathrm{P}_{4} \end{aligned}$ |  | E | $E_{2}$ | E | IV |  |  | G | F | H | 1 |  | $\mathrm{B}_{2}$ |  | c | b |
| 640 |  |  | F | E | $\mathrm{E}_{2}$ | E | IV |  |  | G | F | H | 1 |  | $\mathrm{B}_{2}$ |  | c |  |
| 650 |  | $P_{5}$ | F |  | $\mathrm{E}_{2}$ | E | IV | V |  |  | F | H | 1 |  | C |  | $c$ | d |
| 660 |  |  | F |  | $\mathrm{E}_{2}$ | F |  | V |  |  | F | H | 1 |  | C |  |  | d |
| 670 |  |  | F | G | $\mathrm{E}_{2}$ | F |  | V |  |  |  | H | 1 |  | C |  |  | d |
| 680 | P6 |  |  | G | G | H |  | V |  |  |  | H | 1 |  | C |  |  | d |
| 690 |  |  |  | G | G | H |  | V |  |  |  | H | I |  | C |  |  |  |
| 700 | P6 |  |  | G | G | H |  | V |  |  |  | H | 1 |  | C |  |  |  |
| 710 |  |  |  | G |  | H |  |  |  |  |  |  | 1 |  | c |  |  |  |
| 720 |  |  |  | G |  | H |  |  |  |  |  |  |  |  | c |  |  |  |

Bead phases from Merovingian bead typologies from Germany and England compared to Pion's bead phases from Belgium.
Green: beads from Pion's phase P1.
Orange: beads from Pion's phase P2.
Red: beads from Pion's phase P3.
Yellow: beads from Pion's phase P4.
Blue: beads from Pion's phase P5.
Pink: beads that do not occur in Pion's typology, but do occur in the latest phases of other typologies, referred to as 'P6'.

No colour: no parallels found in Pion's typology. Some phases have multiple colours, and contain beads from two or more of Pion's bead phases.

Based on Pion 2014; Koch 1977; Sasse/Theune 1997; Siegmund 1998; FAG; Koch 2001; Stouch 2004; Brugmann 2004; Hines/Bayliss 2013.

## 3. Beads to be counted in the bead count


4. Colors of beads


## 5. Types of decoration

It was chosen to simplify the number of choices in order to be able to record beads in a large area. It is always possible to indicate greater detail by referring to the type by Koch (Appendix 1c), although most of her decoration types can be found in the figure to the right.

6. Forms of beads

$\square \square \square \bigcirc \bigcirc \bigcirc 0$


| 0 | 0 | O |  |  |  | Tamsmb | 0 ( |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |





## 7. Scheme Leiden types monochrome beads

Choose a color (columns) and a form from the sheet above (lines) and combine the color code with the form code. For instance: a
red opaque biconical bead is $\mathrm{RO}_{2} \mathrm{O}$.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \overline{\overline{0}} \\ & \text { 蔀 } \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RO | RT | GO | GT | YO | YT | BO | BT | OO | OT | BLO | BLT | BRO | BRT | wo | WT | CT | Su | GU | c | AM | 5 | OG | TG | A |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 26 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 28 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 32 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 33 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 34 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 35 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 36 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 37 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 38 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 39 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 41 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 44 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\bigcirc$ |
| 45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 46 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 47 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| $\begin{array}{r}48 \\ \hline 49 \\ \hline\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | , | - | - |  |  |  |  |  |  | 0 |
| 54 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 |
| Totaal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |

