MCHBI – The Medieval Coin Hoards of Britain and Ireland Database - Three years on...

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Introduction

In November 2022 the British Numismatic Society's *Medieval Coin Hoards of Britain and Ireland* database, "MCHBI", first appeared online, and was documented in a BNS Research Blog article¹ at the time; in the ensuing period of almost three years the database has been expanded with additional hoards, and some useful new software features added. Currently with over 2,100 hoards and still growing, this is the largest available compilation of medieval coin hoards for Britain and Ireland. It is now timely to present an updated overview of the current state of this important online resource.

MCHBI - What is it?

MCHBI is an online database with a map interface containing summary details of known medieval coin hoards. "Medieval" is here defined as the time period from approximately AD 450 to Henry VIII's silver debasement in 1544. The MCHBI map can be zoomed, re-positioned, and displayed with a choice of different base maps. Clicking on hoard icons brings up relevant information. Hoard summary sheets include relevant references and, where available, hyperlinks to these references

Target users for the tool are numismatists, historians, archaeologists and others with an interest in medieval hoards, as well as members of the general public interested in hoards found in their locality.

Users can easily employ MCHBI to quickly locate where coins of certain types have been found; and print off a PDF report listing these hoards, together with the relevant references.

Note that details of how to use the application are to be found on the MCHBI section of the BNS website (www.britnumsoc.org), in addition to the extensive online help within the application.

Entering the Program (Fig. 1)

To use the program go to the BNS website and select the MCHBI tab, which takes you to this webpage: https://www.britnumsoc.org/mchbi You can go straight into MCHBI by clicking anywhere on the map shown in figure 1, but before doing that note that you have access with the large buttons located left of the map to ...

Information about the project

¹ "MCHBI" – A BNS Online Map Application for Medieval Coin Hoards in Britain and Ireland, Robert Page, 22 Nov. 2022, British Numismatic Society Research Blog (<u>Link</u>).

- The Instruction Manual under "HELP"
- Details of the Team Members
- Latest News on the Project, including recent updates
- And a little about the Technology used in building the application



Figure 1. Initial View of the application when going in via the BNS website.

The Main Menu (fig. 2)

The database is accessed via a map view, which by default shows all the hoards in the database.

- There are five tabs within the main menu: Settings, Sliders, Simple Search & Advanced Search, and also the relatively new tab for a "Coin Type Search".
- Users may use the "sliders", or use the simple or advanced search functions to filter the hoards to those of interest, e.g. deposited within a certain time period, or, for example, containing coins issued by a certain ruler.
- The Settings tab, shown on the left, controls a lot of what appears on the screen
- Once the desired settings have been selected, and a hoard selection has been made, the user can save the resultant map using their favourite screen capture app.

Filter settings may be saved for later use, or for sharing with others; when saving filter settings the option exists to copy the relevant weblink to the clipboard which can then be emailed to others.

Zooming in and out of the map is controlled by the buttons at top left, also located there are the buttons for creating and managing polygons which allow definition of an area of interest or "AOI".

At the bottom left of the map will be found the scale bar; users have the choice of using metric or imperial units. At top right is a button for selecting different base maps. The bottom right area is where the context sensitive legends appear, and finally, on the bottom frame is a small button which will cause the main menu to pop up.

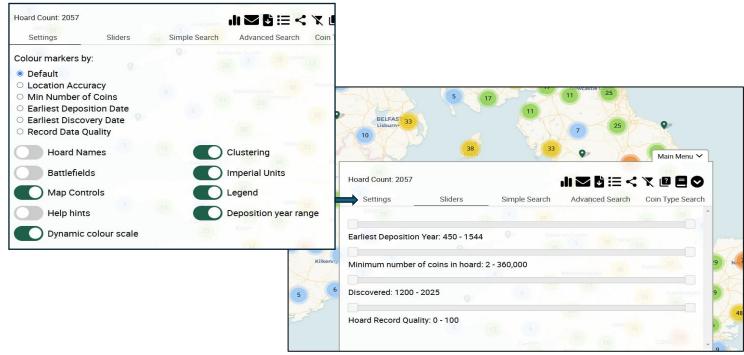


Figure 2. Illustrating parts of the main menu. The left-hand box shows the options available in the settings tab, whilst the right-hand box illustrates the slider controls for hoard filtering. The three other tabs, not illustrated here, are all to do with data searching.

At the top right-hand of the Main Menu there are a series of icons which provide access to useful functions. These are described on fig. 3, and a few of these icons have been added after the initial program release.

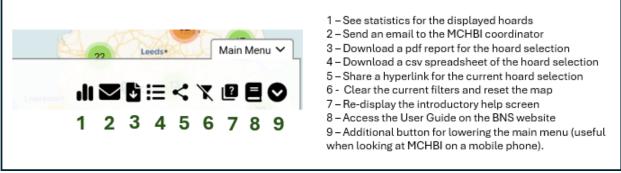


Figure 3. Main Menu Icons

Hoard Icon Colour Coding (figs 4a/4b)

The Settings tab in the main menu will allow a user to choose between six different ways of colouring the hoard location icons – these are illustrated. Each of the five non-default choices has a context sensitive legend automatically displayed at the lower right-hand corner of the map.

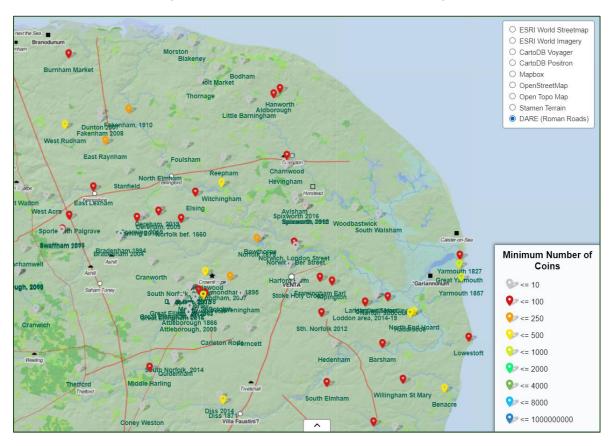


Figure 4a. An example of hoard icons coloured by the minimum number of coins in the hoard, and overlaid on a basemap showing Roman roads.

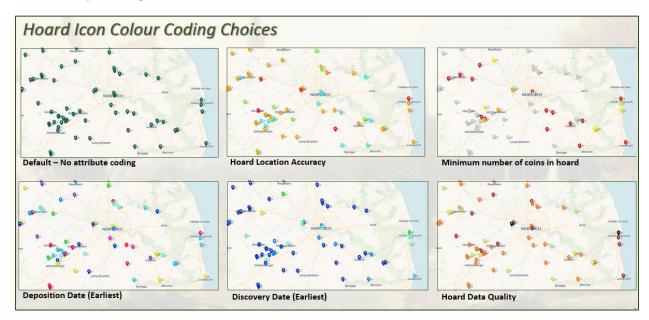


Figure 4b. The hoard icon colouring choices.

Hoard Summary Sheets (fig. 5)

For each hoard in the database a hoard summary sheet is available; an example being shown in fig. 5. These summary sheets are not intended to provide a comprehensive account of the hoard, but instead they include a brief summary of the hoard and, importantly, list of references that can be consulted for further information. Many references are nowadays available online, and working hyperlinks, where available, will take the user directly to the applicable reference.

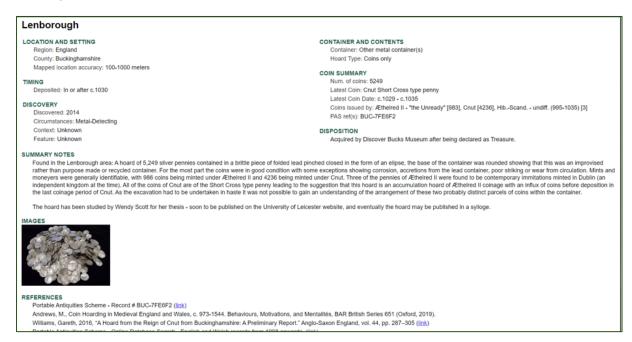


Figure 5. Clicking on a hoard icon brings up a summary box with a hyperlink to the hoard summary report. A key feature for users is the reference list – when references are available online a hyperlink is given which will take the user directly to the reference. The facility exists for users to download a batch of summary reports for a hoard selection.

Selection of Hoards with Given Coin Types (figs 6/7)

The most significant change last year to the functionality of MCHBI was the addition of the ability to search on selected coin types. All hoards are having their specific coin types entered into the MCHBI database where sufficient information exists; some hoards do not have sufficiently reliable data, particularly those found in the nineteenth century or earlier. Of the hoards in the database it is estimated that about two-thirds have sufficiently good data available for their coin types to be added to MCHBI, and over 700 of the 2,000+ hoards have been processed so far.

Reference to fig. 6 shows where the user can find the coin search option: a tab located in the top right region of the main menu. The user enters the name of the coin issuer and is then presented with a list of the available coin types to choose from. It is possible to select more than one coin type at a time by depressing the CTRL key whilst making selections.

Particularly considering the fact that coin types are now being added, the MCHBI application is becoming of growing relevance to numismatic researchers.



Fig. 6. For those occasions when an MCHBI user wishes to search on a particular coin type, or group of types, a new search feature has been introduced. This is accessed from the top right-hand side of the Main Menu. In this example the user has chosen to show hoards containing class 5b and/or class 5c/5d mules of Henry III long cross pennies.



Figure 7. Example Hoard Record with Coin Types

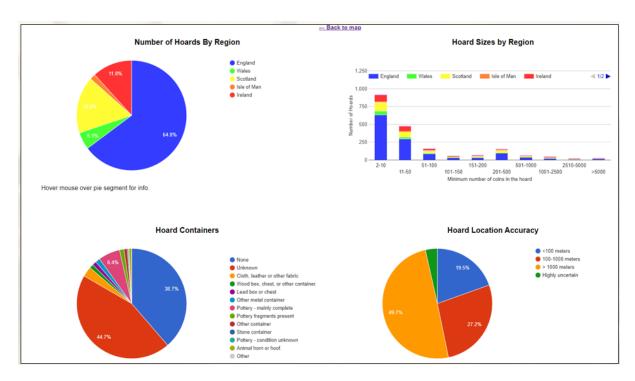


Figure 8. Some of the statistics charts for a hoard selection.

Hoard Statistics (fig. 8)

Using the main pop-up menu, and clicking on the bar-graph icon on the top menu bar takes one to a screen with a number of graphs. These graphs are dynamically linked to the current hoard selection – e.g. if one choses to plot hoards deposited between 1100 and 1200 AD the graphs will summarise the data for that particular date selection. Changing the hoard filters will automatically change the data displayed on the plots.

There are currently six different charts, and it is hoped to add a few more charts in due course.

Battlefields Display Option (fig. 9)

Some hoards may have been buried in haste ahead of an impending battle, and it can thus be useful to know battlefield locations. When a user switches on the battlefield display option then the battlefields shown on the map will be controlled by the hoard deposition date slider, for example if hoard deposition dates of 1000-1100 AD are selected then only battles fought within those dates will appear on the map

This feature is of most use when the selected date range is quite limited. If no hoard deposition range is selected then all battlefields will be plotted on the map.

The location of many battlefields is uncertain - those locations that are reasonably well known are shown in a darker symbol.

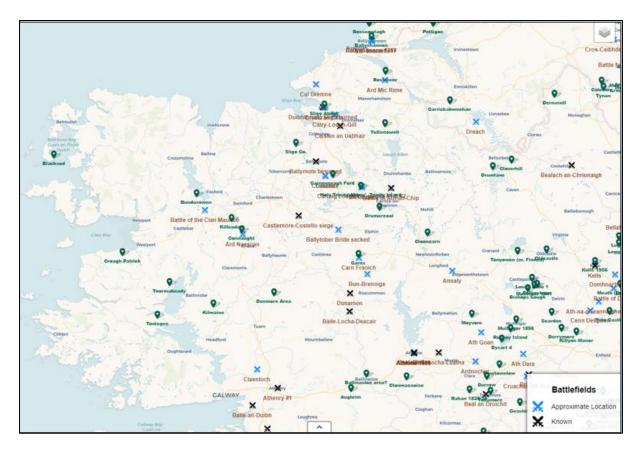


Figure 9. The Battlefields Display Option - Clicking on a battlefield symbol will generate a small pop-up with battle year and, if available, an online reference article for the battle

Hoard Record Quality (fig. 10)

MCHBI contains a spectrum of different quality records. On the one hand we have hoards that were found in recent years that have been fully documented on the basis of current numismatic knowledge, and the coins may have been preserved in a museum. On the other hand are the reports of hoards found hundreds of years ago, vaguely documented and with little knowledge of the type and number of coins, and the whereabouts of the coins often unknown.

A numismatist using MCHBI for their research may wish to have a quick and easy way to filter out the less reliable hoard records. Nine different input parameters are assessed, and a total record quality score (0-100) calculated for each hoard. A slider bar in the MCHBI main menu is available such that the poorer documented hoards can easily be filtered out.

The 2023 introduction of Analytics, Hoard Record Data Quality and Battlefields were all documented in a brief 2023 article on the British Numismatic Society's Research Blog.²

² Three Recently Added New Features on the Medieval Coin Hoards Website, MCHBI, Robert Page, 12 June 2023, BNS Research Blog. (<u>Link</u>)

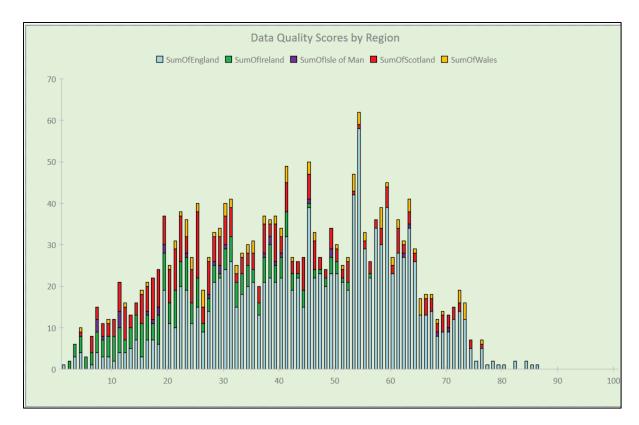


Figure 10. Hoard Data Quality Plot

Technology utilised

A summary of the open-source software used for MCHBI can be found on the BNS website.3

MCHBI - Future Plans & Challenges

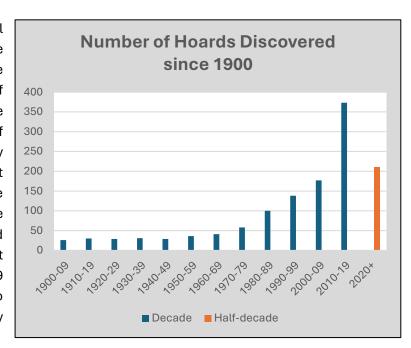
New hoards continue to be added as soon as sufficient data becomes available, either through the Portable Antiquities Scheme website, or the Scottish equivalent. Sadly, the Republic of Ireland has no similar website. Occasionally the MCHBI utilises information from the press, but supplements these records when more reliable data becomes available. In addition to adding new hoards there is a continuous process of corrections and updates to existing listed hoards underway, including information notified by users. The MCHBI application continues to benefit from minor programming enhancements, and readers are encouraged to suggest further programming ideas.

The hoard data quality algorithm will be revised during 2025 to better utilise the full range of possible scores.

Besides the work outlined above, the major current effort is being devoted to continuing refinement of the tables of coin issuers and coin types, as well as continuing to capture the various coin types for those hoards where sufficiently detailed and reliable data exists.

³ Technology link: https://www.britnumsoc.org/mchbi?view=article&id=292:mchbi-technology&catid=13

It is expected that the MCHBI will to grow over the continue coming years, and indeed there is no sign that the rate of discovery is slowing down. The chart shows that for the first half of the 20th century the discovery rate was fairly constant at about 30 hoards/decade. From the middle of the 20th century the finding/reporting rate increased dramatically. We are only about halfway through the 2020-29 decade, but the discoveries so far indicate that the discovery rate is probably still increasing.



The MCHBI database is now the largest repository of medieval hoard data for Britain and Ireland, and at the time of writing contains data on 2,057 hoards. As further data is added on the various coin types present in the hoards the MCHBI application should prove of increasing value to numismatic researchers and other users.

The MCHBI team welcome comments from users, and these may be sent using the relevant email icon in the main menu or simply email hoards@britnumsoc.org

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