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Authors	Antony Firth and Emma Firth
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Floodplain Meadows Project: Mapping the Historic Floodplain Meadows along the Rivers Severn and Avon

Fjodr 16653

FPM Data – Quick Guide

This Quick Guide accompanies a shapefile – *Severn and Avon Historic Floodplain Meadows.shp* – that is one of the principal outputs of the project Mapping the Historic Floodplain Meadows along the Rivers Severn and Avon, prepared by Fjodr Ltd. for the Floodplain Meadows Partnership.

The methodology is based on that developed by Fjodr Ltd. for the Historic Extent of Floodplain Meadows: Dorset Stour and Thames Tributaries, set out in the following report:

Firth, E. and Firth, A., March 2022, Historic Extent of Floodplain Meadows: Dorset Stour and Thames Tributaries. Unpublished report by Fjodr Ltd. for the Floodplain Meadows Partnership.

The report is available online here:

<https://www.floodplainmeadows.org.uk/sites/www.floodplainmeadows.org.uk/files/Historic%20Extent%20of%20Floodplain%20Meadows%20-%20Stour%20and%20Thames%20-%20Fjodr%201303022%20Final.pdf>

The shapefile comprises a single layer of Floodplain Meadow Polygons (FMPs) as spatial information with attributes.

The shapefile covers a study area comprising part of the catchment of the River Severn and River Avon. The selected stretches include:

- the main channel of the Severn from Gloucester to Worcester

- the main channel of the Avon from Tewkesbury to Cleeve Prior

The study did not include minor tributaries.

For the purposes of collating data, the study area was defined by a 1km buffer on the stretches listed above as mapped on the [OS Open Rivers](#) product.

FMPs have been created based on the interpretation of multiple sources relating to the historic environment, including the following:

- Historic Ordnance Survey maps available in the project GIS via a WMS link to Edina Digimap provided by the Floodplain Meadows Partnership under the Open University's licence. Generally, Epoch 1 – the earliest editions typically dating to around 1880.
- British Library Ordnance Survey Drawings made between 1780s and 1840 in preparation for the first edition of one-inch OS. Available from <http://britishlibrary.georeferencer.com/start>.
- Tithe maps can be searched on the National Archives which in turn provides a link to The Genealogist <https://www.thegenealogist.co.uk/tithe/> where the tithe map and its apportionment records can be viewed for a subscription. Local records offices also hold copies of the tithe maps.
- Other historic maps available online, for example 1780 City of Gloucester (limited coverage) available at Know your Place: <https://maps.bristol.gov.uk/kyp/?edition=glos> and Hanley Castle Enclosure Map 1797 available at <https://gis.worcestershire.gov.uk/website/HanleyCastleMapping/>.
- Google Satellite imagery.

Various non-map sources have also been used, for example 1016-1035 boundary clause translated by Della Hooke in Worcester Anglo-Saxon Charter Bounds, P.387 cited at <http://www.harvington-history.org.uk/pre1066.htm#%C3%9Eennecumbe>.

The form of the record is intentionally simple, comprising a single layer in a flat-file format, so that it can be readily included within third-party workspaces/GIS projects.

The mapping of individual polygons is directly from georeferenced historic sources. In some cases, there may be inaccuracies mapping from these early sources, due to the methods used at the time of the survey not being as accurate as in later maps. Where field boundaries on earlier maps are recognisable on later maps, corrections can be made accordingly.

The following attributes are recorded for each FPM in the shape file attribute table:

ID_HistFPM	Identifying number for each FPM.
FPM_name	Defined by the area where the FPM is located, limited to 254 characters or specific name if one recorded on a source.
County	County FPM is within.
Parish	Parish FPM is within.
River	River FPM is located on.
ModLanduse	Modern land use as seen on the most recent satellite imagery.
FPMNotes	Description of the FMP – limited to 254 characters so necessarily concise.
Lammas	Reference to Lammas in sources. Yes/No field
Funnel	Does FPM have a characteristic funnel shaped entrance Yes/No field
Doles	Reference to doles, either in descriptions or visible on map sources such as tithe maps. Yes/no field
Drove	Drove or lanes which connects a settlement to a meadow, often via a funnel shaped entrance to the meadow. Yes/No field
Common	Reference to Common in sources. Yes/No field
Drainage	Reference to drainage in sources. Yes/No field

Placenames	Reference to specific placenames associated with floodplain meadows in sources. List of placenames such as ham, mead, common, lots, allotments, and doles.
Domesday	Whether there a domesday settlement with recorded acreage associated with the settlement in this parish. Obtained from Open Domesday ¹ . Acreage recorded.
Tithe_Ref	Tithe map reference.
OS_Map_Ref	Historic OS Map reference.
OSSurvey_Ref	Historic OS Survey Drawing reference.
OtherMap	Any other historic map sources, such as estate maps, which reference the FPM.
Rep_link	Report or other reference material where the FPM is identified and if available, the link to the report or reference material.
Confidence	<p>Confidence level in the identification of the FPM, with 1 being low and 5 being high. Confidence reflects the amount of information available about the FPM.</p> <p>A high confidence is assigned to an FPM when there are multiple sources and a high number of criteria about the meadow can be recorded. For example, a meadow that appears on several maps, has a funnel shaped entrance, doles mapped on the tithe map and named as a common in the tithe apportionment records.</p> <p>A low confidence meadow might be an FPM where only the boundaries within the floodplain indicate the presence of a meadow but there is no other evidence available.</p>
Compiledby	Who created the record.
Compiledate	Date record created.

¹ <https://opendomesday.org/>

Summary

A total of 81 FPMs were identified from the sources and recorded in the *Severn and Avon Historic Floodplain Meadow.shp*. Figure 1 shows how the meadows appear on each of the different sources for the FPM at Lower Hams/Lords Meadow at Kempsey, on the River Severn. In the area of Gloucester and Tewkesbury, several FPMs were named on the OS 25" Epoch 1 maps and were also present on the earlier OS Survey Drawings. Some FPMs also had areas of stones mapped on the OS 25" Epoch 1 maps which corresponded to the doles mapped on the tithe maps (Figure 2).

The large number of meadows identified along these two rivers may be attributed to the nature of the rivers, both of which were important transport routes historically. FPMs at Worcester, Gloucestershire and Tewkesbury are known to date back to the medieval period and other meadows were identified near known medieval sites. Meadows were also found with field boundaries that appear to respect the remains of medieval field systems (Figure 3). Hooke² translated a boundary clause which has provided a fascinating insight into the FPM at Hynham Meadows, Harvington on the River Avon. The translated boundary clause provides an interesting use of language which could be linked to a tithe plot which had the name "Hynham Meadow" pencilled onto the 19th century tithe map. The 11th century boundary clause lists "*hunig hommes streote*" which Hooke translates to Hunighamm/meadow where there is honey. The "steort" relates to the term stert/sturt, or tongue of land and was also observed at meadows recorded in Dorset³ where Sturt Mead was recorded at Sturminster Newton. A later 14th century perambulation records this FPM at *Hunyhamsterte*. Documentary evidence dating back to the 18th century was available for meadows at Bushey, where the Dowdeswell Map of 1792⁴ records common meadow.

Summary of criteria recorded:

² 1016-1035 boundary clause translated by Della Hooke in Worcester Anglo-Saxon Charter Bounds, P.387 cited at <http://www.harvington-history.org.uk/pre1066.htm#%C3%9Eennecumbe>

³

<https://www.floodplainmeadows.org.uk/sites/www.floodplainmeadows.org.uk/files/Historic%20Extent%20of%20Floodplain%20Meadows%20-%20Stour%20and%20Thames%20-%20Fjodr%201303022%20Final.pdf>

⁴ Dowdeswell Map of 1792

http://www.bushleyparisharchive.co.uk/authenticated/Browse.aspx?BrowseID=149&tableName=ta_documents

Criteria	Yes	No	Other
Lammas	7	74	
Common	24	51	Possible – 6
Funnel	29	47	Remnant 1 Possible funnel 4
Doles	21	56	Possible 3 Remnants 1
Droves	32	43	Ford to meadow 2 Possible 4
Drainage	50	29	Possible 2

Summary of placenames

Placename	Number of FPMs
common	1
common, ham	1
ham	30
ham,	1
ham, common	3
hays	1
lease, ham	1
mead	1
mead, ham	1
no	7
none	33
stert, ham,	1
Grand Total	81

Please contact Fjordr at info@fjordr.com with questions or feedback.

Antony Firth and Emma Firth
Fjordr Ltd

Appendix 1

List of Figures

Figure 1 Comparison of difference sources, Lower Hams/Lords Meadow at Kempsey on the River Severn.9

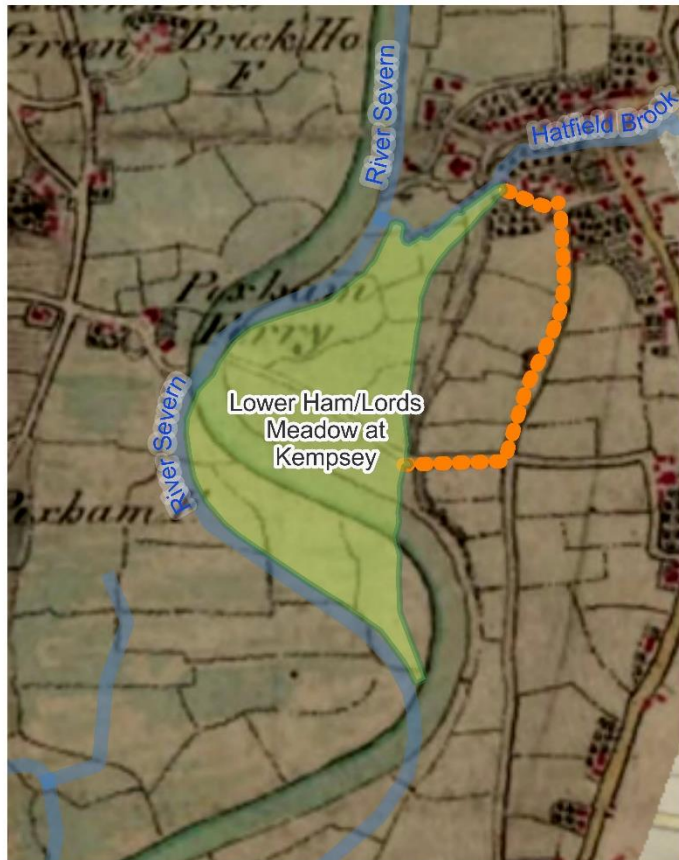
Figure 2 Doles and Stones shown on tithe maps and OS Six Inch maps at Upham and Twyning meadow on the River Avon. 10

Figure 3 Lidar showing medieval field systems adjacent to the FPM at Upham and Twyning Meadow on the River Avon 11

Lower Ham/Lords Meadow at Kempsey

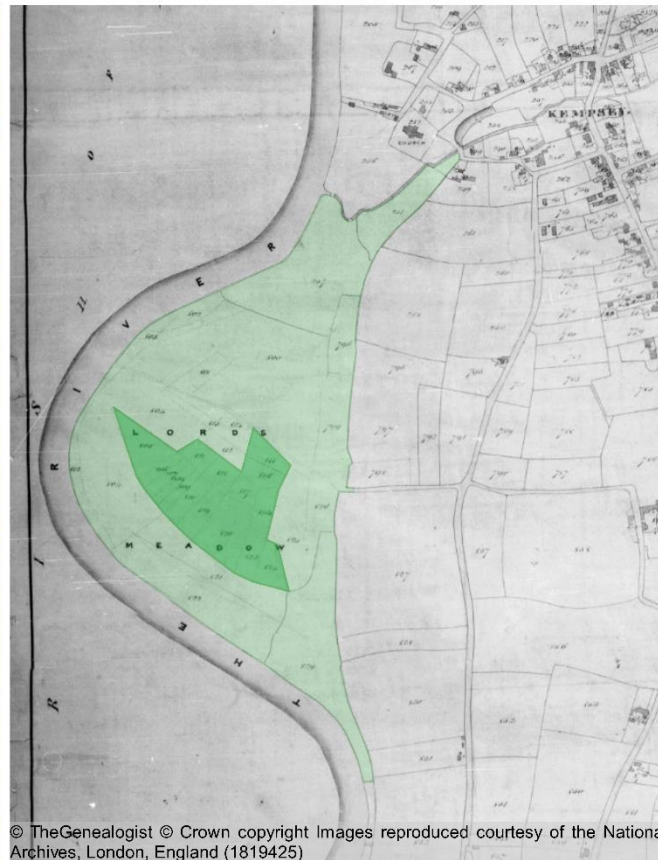
Lower Ham marked on OS 25" Epoch 1 and tithe map shows the lower half has an area of doles marked as Lords Meadow. Recorded in tithe records as "common meadow". There is a drove/lane from Kempsey, that joins the slight funnel shaped entrance to the meadow. The drove continues across the meadow to Pixham Ferry., which is shown on both the earliest and latest maps.

The Bishops Palace, a former medieval site, is situated directly to the north of the meadow.



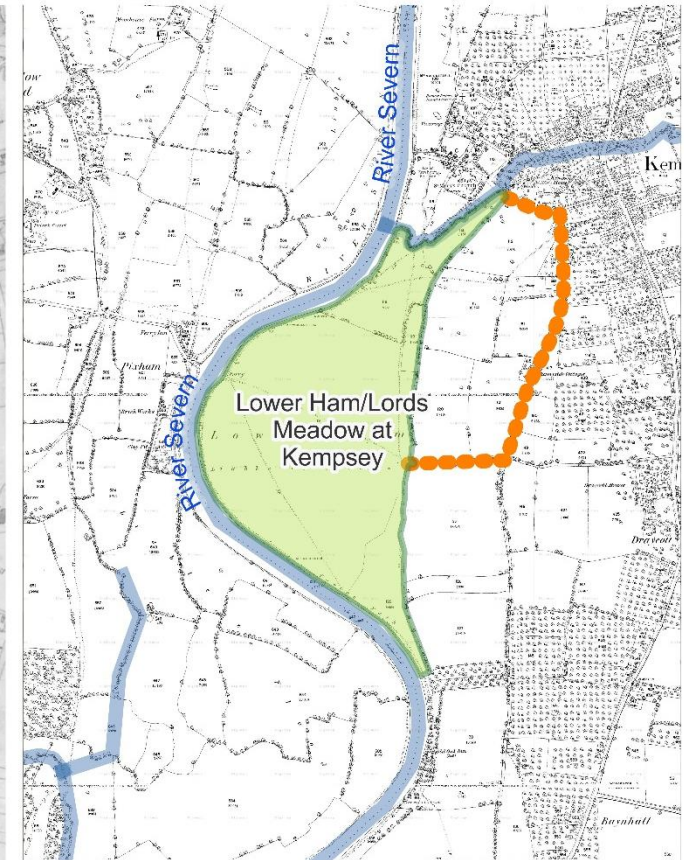
OS Survey Drawing 1812 Great Malvern

Due to mapping inaccuracies when the original map was created, the map does not georeference exactly to the modern location hence there is not always perfect alignment of landscape features.



National Archives IR 30/39/74 Tithe map of Kempsey (parish), Worcestershire 1840

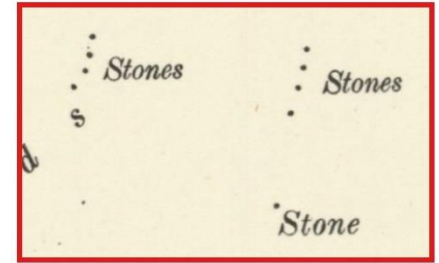
Dark green area shows location of former doles.



OS 25" Epoch 1 map

Figure 1 Comparison of difference sources, Lower Hams/Lords Meadow at Kempsey on the River Sever.

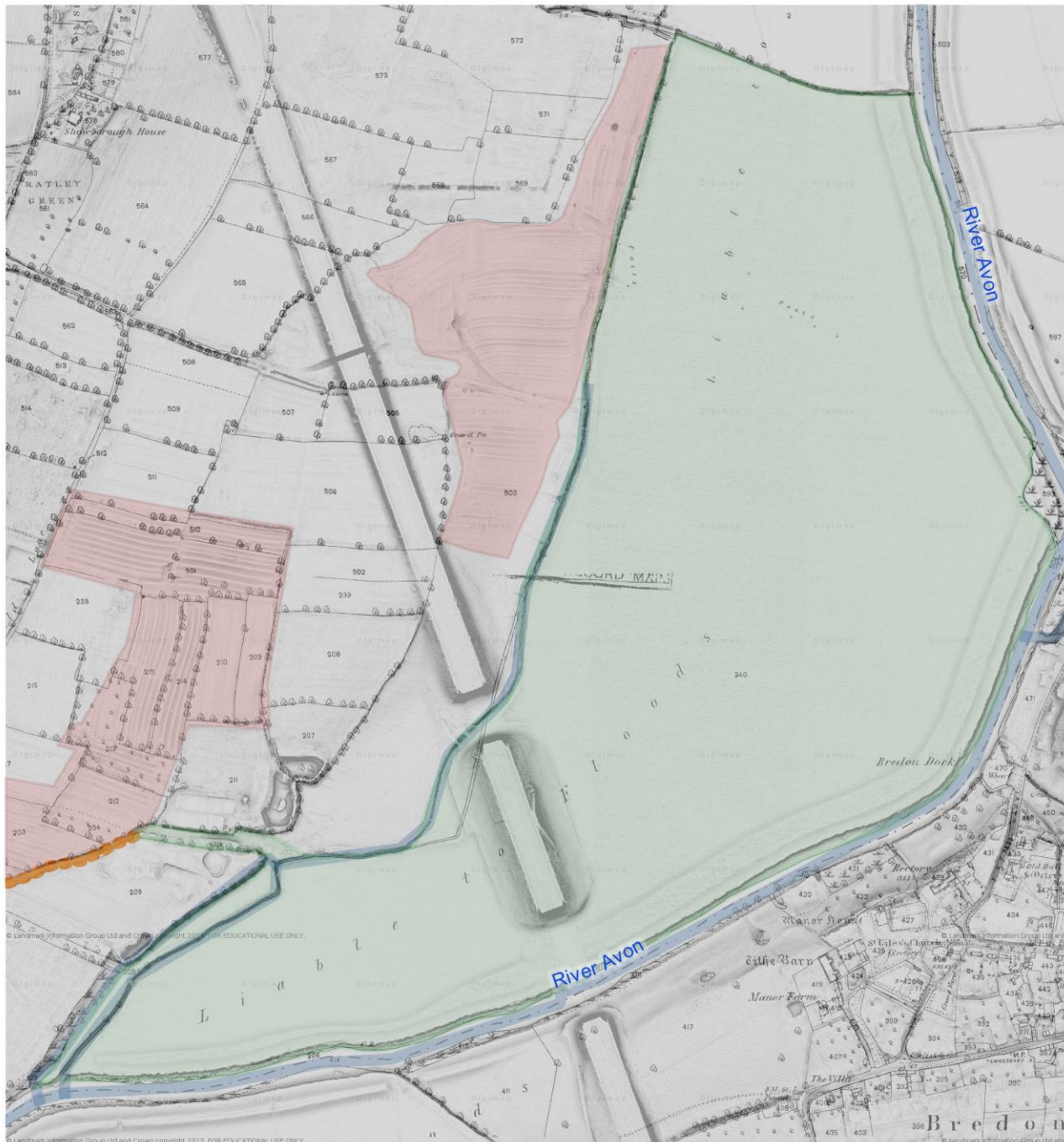
Upham and Twyning Meadow, Twyning, Gloucestershire



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© TheGenealogist © Crown copyright Images reproduced courtesy of the National Archives, London, England (1819425)

Figure 2 Doles and Stones shown on tithe maps and OS Six Inch maps at Upham and Twyning meadow on the River Avon.



Upham and Twyning Meadow,
Twyning, Gloucestershire

Lidar shows areas where medieval
ridge and furrow remains are visible
(area coloured red). These areas
respect the edge of the floodplain
meadow.

Figure 3 Lidar showing medieval field systems adjacent to the FPM at Upham and Twyning Meadow on the River Avon