



Excavating Prehistoric Roundhouses

Guidance on good practice and effective outcome for future research

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Developed by

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Aberdeenshire Council is working on a regional archaeological research framework, which includes an assessment of its excavated roundhouse sites. As a result, the following information and guidance was developed. Coherent recording standards will allow production of a comparable record of information that can potentially be gained from modern excavation and post-excavation work. Such records can inform regional syntheses.

The following document is intended as a compendium of ideas on how to get the most out of the surviving archaeology, and as a guide to best practice, irrespective of the circumstances of the work. It is not an exhaustive list of dos and don'ts but rather a helpful note for excavators, project managers, and advisors to enhance what can be gained from the archaeological evidence. The focus is on the main roundhouse evidence in Aberdeenshire and Moray, consisting of dry land sites with earthfast timber architecture as the main structural component. A complementary guidance will be prepared for burnt roundhouse remains.

For experienced archaeologists, most of the material will be known already, and standard practice. However, there are some ideas and new thoughts resulting from recent research into northeast roundhouses that could help to improve the excavation and preparation of the record, and the record's potential as a research resource.

This is also a dynamic document and will benefit from your comments, feed-back and critique.



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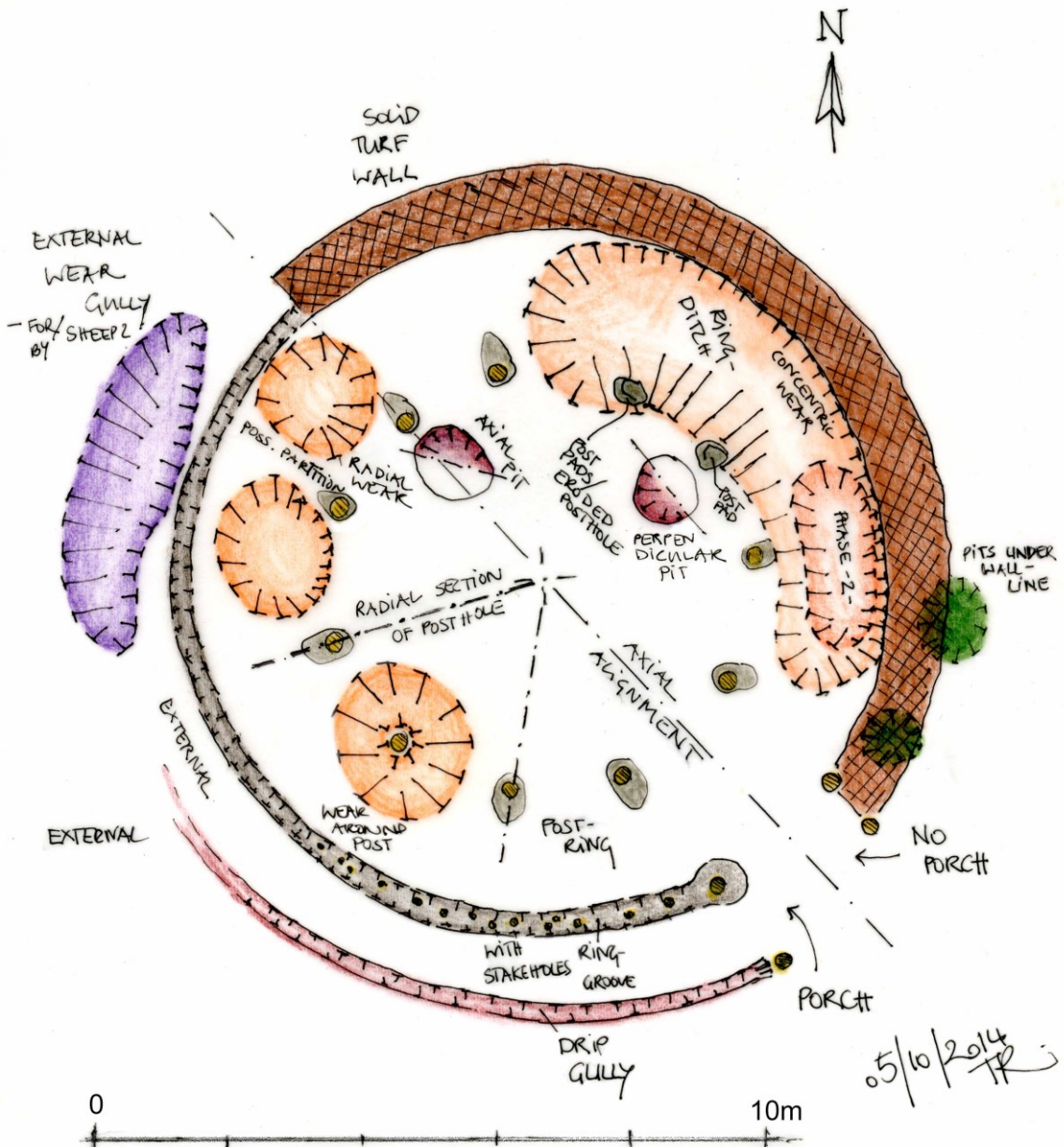
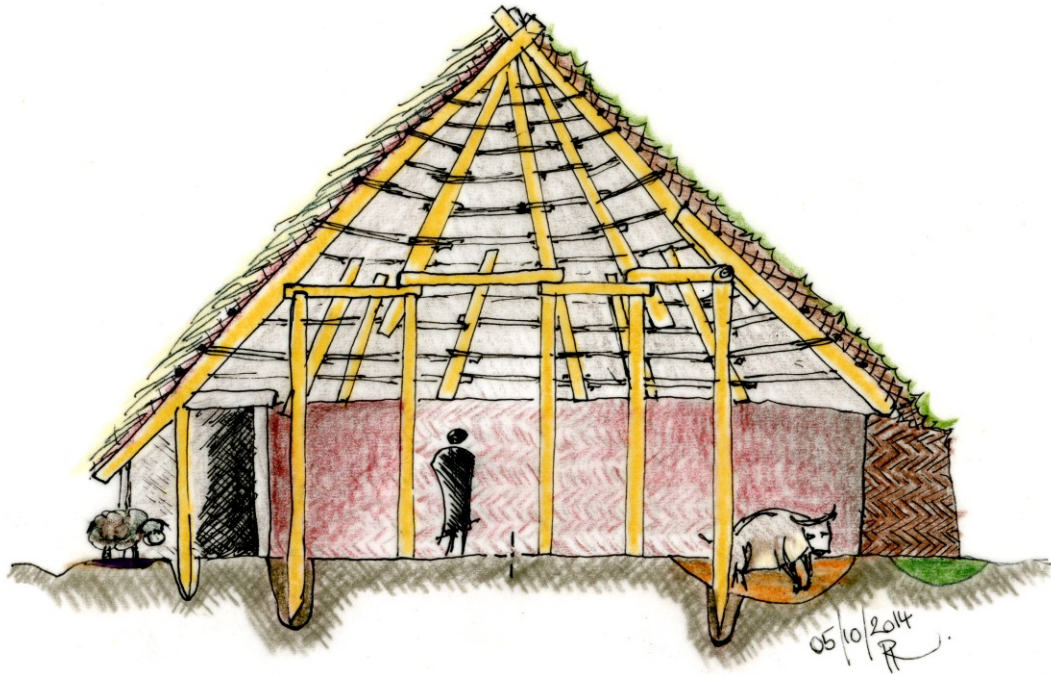


Figure 1 : Typical roundhouse features in plan and section. Drawings T Romankiewicz.

1. PRE-EXCAVATION

Inspect or ideally **survey** the area before machinery is brought on site to identify any change in local **topography, upstanding remains/ banks/ walls**, etc. or evidence for **scoops/ depressions/ negative features** that could provide a hint of the extent of the house itself, its **entrance position** and the **site context** more generally, especially regarding water management and drainage issues.

Describe the **setting** with consideration of orientation, aspect, contours, wind exposure, rain, sun, soil condition, nearest water sources (for humans and beasts) and connections into the surrounding landscape. Are there any routeways, water systems, or other infrastructure features that could have connected the site with the wider area, and/ or might have influenced the choice for this site?

Which **other monuments** (earlier and later) survive in the immediate surroundings that are visible or to which the site would have been visible? Establish a **topographical context** of present and possible **past resources** of the site and the immediate area.

Conduct a **metal-detecting survey** across the area to be excavated – if time allows, strip the site in spits (20cm, i.e. less than 1ft = depth of reach of detector) and re-detect at each new level.

2. EXCAVATION

Get everybody who will be excavating on the site to have a look at this guide and encourage them to **think about** how the roundhouse would have been built, used and abandoned. The excavation process is essentially a way of **building a roundhouse in reverse** order, as the house remains collapse in reverse order of construction: the roof usually collapses first and should bury all upper floors, ground floors, whatever remained inside etc. under it. The walls then collapse on top of this.

Consider whether the **original ground surface** is **preserved? What** material has been **preserved in hollows**, scooped features, ring-ditches? Were these infilled **during** the **use** of the house, immediately **on abandonment** of the house, **or much later?** Or is this simply the **collapsed building material** of the house? Was the house deliberately collapsed/ burnt down or was it abandoned to gradual decay?

Were the **posts removed** or did they **rot in-situ?** Did **someone return** at a **later** stage to salvage materials or objects, or to bury objects/ human or animal bone?

a. Record Full Plan

Expose the **full plan** as much as possible: consider the **diameter of the post-ring** in relation to the **overall house diameter** (inner line of outer wall). Peter Hill has argued that the post-ring diameter takes up 2/3 of the overall diameter, i.e. a **ratio** of ca. **33%** between outer and post-ring diameter. Rachel Pope has found this ratio to be nearer **40%**, i.e. that many houses offer more peripheral space between the post-ring and the possible line of the outer wall. **What applies to your house?**

Excavate as much of the **area around** the **roundhouse** plan as possible, in particular in front of the entrance area. Is there a **porch?** Would the outer wall line sit along the inner end of the porch or could the depth of the porch represent the width of a turf wall (i.e. no projecting porch)?

Consider that **rafters** could **project beyond** the **outer wall** and be secured **in the ground**. Check for **pits** or **shallow hollows** concentric with the outer wall line. Record their distance to the outer wall line to help determine the outer wall height and roof height, assuming a 45° pitch – or does the position of such features suggest a lower/ steeper roof pitch?

Are there any larger pits or **other features** in the **proximity** of the roundhouse that could be contemporary? Or are there pits underneath the outer wall, which could have played a part in the construction of the house, or the layout of its foundations?

b. Identify Outer Wall Line Features

Identify possible **features** (e.g. slots, grooves, postholes, stakeholes, depressions) or **residues within the area of the projected outer wall line** for any indication of outer wall construction, its materials, and overall dimension (e.g. charcoal, burnt turf remains, concentration of redeposited material such as flint debris, small stones concentrations → all these could be **indicative of a turf wall** that was cut from an area which contained earlier material, small stones, etc.).

Think about **ring-grooves** and their **function and formation**: are they an irregular, silted-up drip gully or are they a cut feature, possibly containing evidence for posts or stake settings, planking, stone packing or a wattle frame?

c. Sectioning Postholes

Where possible **section postholes radially**, and **relative to the projected centre of the roundhouse**, as this follows the line of structural forces within the roundhouse (see Figure 1 and Figure 2). This should show any structural settling or deformation and help understand the roundhouse superstructure. See Murray & Murray 2006 for an example of what information can be gained. However, where postholes are part of a feature complex and have the potential of showing phases of intercutting, re-use or repair, then of course excavate on a more appropriate angle.

Record position of **stone packing** (if extant) **in relation to post-pipe** (if extant). Sometimes the post-pipe is not obvious, but the position/"floating" of packing stones can indicate that the post **rotted in situ**, whereas tumbled stones, stones at odd angles and recuts into top of posthole may suggest the **post was lifted**, and the stones collapsed into the hollow. If there is a post-pipe (or a shadow thereof), was the **post set centrally within the posthole or against one of the sides** (side towards centre of roundhouse OR side towards outer edge of roundhouse)? This will help clarify how much structural knowledge the builders had, and how well they understood how to compensate for structural forces within the timber frame. Was the subsoil the main counteraction against the twisting of the post under stress (as seen in Figure 2 blue) or was this counteraction the role of the stone packing, because the subsoil was yielding too much under pressure (Figure 2 red)? Was the stone-packing a deliberate placing or more a natural accumulation of stones?

Record the condition of the subsoil and the weather condition while you are excavating the posthole: are the edges fragile and collapse easily? Is it a heavy clay that is hard to cut/ remove? How do subsoil properties change when wet? You will be recording the same conditions that the prehistoric builders experienced. **Is there a change in the subsoil** where the post-pipe stops at the bottom of the posthole (in particular: does gravel or sand start at this level)? Is the **bottom of the posthole prepared** (perhaps with sand infill/ gravel for better drainage)? Any stains of charcoal at the base that could indicate that the **post end was charred** to prevent rot before it was put into the posthole? This can often be a thin ring/ halo of a charred circular line, as only the outside of the post was charred in a fire.

Compare features and terminology with Figure 1

ROLE OF PACKING:

TYPICAL RAFTER
ROOF
(THRUST)

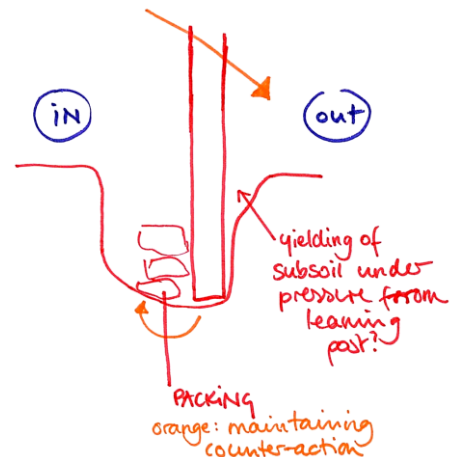
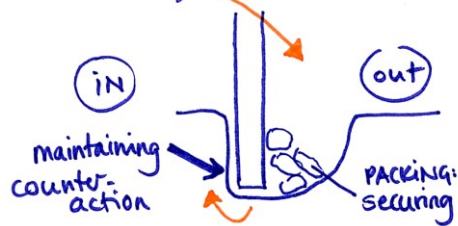


Figure 2 : Sketch section of a posthole. Drawings T Romankiewicz.

Consider Formation Processes of the Posthole Fills:

- Post *in situ* or removed? See some ideas on stone packing/ re-cutting above.
- Evidence for re-cutting/ re-fitting of stone packing. Has a **post-pad** been slid in between the rotting post-pipe and the upstanding post and does this post pad **seal the post-pipe fill**?
- Describe in detail different fills of posthole and give grain size for fills. Compare this with the surrounding subsoil. This will help identifying whether a **deliberate infill** was prepared to allow better drainage and **reduce post rot**.
- Remember **not all posts** are necessarily **round** – split trees were used as well.

Look for Post-pipes:

- Is the post-pipe filled with secondary material and are the upper and lower boundaries of the post-pipe blurred? → this might indicate **post was removed by moving it backwards and forward to loosen it** from the packing. The material within the post-pipe in that case can be a mix of post rot and material trickled in during use of house and rotting of post, and trickling in at the time of post removal.
- **100% sampling of post-pipe fill** for flotation in order to obtain as much charred material as possible from a **burnt post** for dating. Also ideally 100% wood species identification of charcoal fragments together with recording of fragment size and possible diameter of original wood piece. This will help understand what **timber resources** were exploited and whether any of these could be remains of the post. Different timbers have different structural or technical properties, and this helps to understand whether certain timbers were preferred for certain tasks. The sample may also include **small charred plant material** (cereal grains, roundwood, nut shells etc.) that entered the post-pipe cavities created by the rotting post, particularly at the top of the post-pipe fill. This material **dates the use of the house**, while the **charred post** remains will **date its construction** (beware of reused posts).
- **Small-find as many charcoal pieces as possible from the post-pipe** and record on charcoal recording sheet while still in the field. Do not rely on this information to be recorded in the post-ex lab, because charcoal is fragile; record as much as you can (**count of rings visible, fragment size, estimated original diameter of wood piece, sketch**) as soon after lifting as possible and wrap pieces in tin foil as fragments are likely to break up in subsequent processing. **Keep each piece of charcoal in its own bag, do not mix different pieces**. Only one piece can be used for **single entity dating**, but it does not matter if that one piece subsequently broke into several pieces, as long as it is still demonstrable that these were from a single entity, i.e. all fragments within the bag were originally from one piece of charcoal.

d. Identify Features Outwith the Roundhouse Plan

Identify possibly associated structures such as **4- or 6-posters**, and consider excavating “**random**” **pits or postholes** in the vicinity of the house, under the wall line, etc. (see comments above). Can **similar-sized, similar-filled features** be associated to form structures? What other characteristics or patterns could link such features? **How do they relate to the roundhouse?**

e. Internal Features, Indicators For Possible Functions

Think about how the interior could have been used (see notes on ring-ditches below).

Is there a (**central**) **hearth or cooking pit**? If you can only dig a selection of internal features (apart from the postholes) dig the feature that sits approximately in the centre of the roundhouse and any feature that shows burning. **Sample** these **extensively**, and sample **every layer separately**. Think about which layers might be promising for **micro-morphology**. Target layers that suggest the survival of original floor surfaces or that represent short-lived activities. **Hearths and cooking pits** are often reused, rebuilt, recut and can contain the **life story of the house**, how long it was used for, in how many sequences/ phases, etc. **Target** these features **for dating and macro-plant analysis**.

How are the internal features **arranged** in the **interior**? Is the hearth/ cooking pit central or off centre (which side of an axis through the main entrance). **Discrete patches or lensing** indicate single, short-lived activities, which are **more promising for dating** than general fills that could contain redeposited material or trampled contamination from outside. Entrance areas are therefore more problematic than “**dark corners**” that may have seen less recurring activities. **In which quadrant** do features concentrate and **in what relation to the entrance** (in line with a central axis through the entrance; perpendicular to this axis, or both? – see Figure 1). **Where are the areas** that are seemingly **empty** of pits/ wear patterns/ erosions?

What functions could these features have had? **Internal partitioning? Built in furniture/ loom?** Is there a coherent pattern to them? Excavate these features! And particularly **record depth and size in order to identify possibly related/ similar features**. Take account of **truncation** across the house, which can vary downslope/ upslope.

Could any of these features have a function in the construction or repair of the house? Think about possible **processes during construction, use and abandonment** and look out for related features, such as **smaller postholes/ pits adjacent to post-ring posts** that could indicate **props or stud support** during construction or post replacement/ repair, temporary support for ring-beam, etc. Excavate these features!

Is there evidence for elongated slots for easing the slipping of the post (or an accidental formation of such slots when the post is put in place?) Excavate these features!

Roundhouses are often kept clean and floors swept out frequently. Every **artefact or ecofact** in-situ therefore contains a precious piece of information about use patterns. **Record their distribution in 3D** and comment whether this appears to be an **accidental loss or deliberate placing**. Pay particular attention to artefacts and their position when excavating postholes, in particular entrance postholes or thresholds, etc.

Undertake **pXRF** of chemical elements, in particular phosphate analysis, within the house, but also within the entrance, outside the entrance, outside the house – think of human **activity areas**, midden piles, latrines, sheep sheltering under eaves, etc.

f. Identify Ring-Ditch Shape, Contour and Stratigraphy

Consider formation processes for the ring-ditch fill, in particular as these may not represent primary infill, but act as **traps for sediments, remains from structural collapse or secondary material**:

- **Single phase or several phases of infill?** Excavate and sample **several sections across the ring-ditch**. In open area excavation, take **sub-samples of different areas** across the ditch and **at different levels** (cf. Figure 3).
- **Single fill:** → occupation deposit? → destruction deposit? → left open to elements and gradual silting up? Deliberate infilling from a nearby site or midden? **Post-deposition homogenisation** of infill by prehistoric (or later) ploughing?
- Look for any **remains/ residues of original occupation deposits** and **take a grab** (for soil analysis such as **phosphates, phytoliths**, and for **hand-retrieving datable material** in the course of analysis) and micro-morphology sample, **plus bulk sample** if sufficient material survives; ideally produce an overlapping sequence of **micro-morphology** samples of the full ring-ditch fill sequence, or **at least of the lowest layer** at the interface with the natural.
- Look out for **discrete lensing** that could indicate small-scale, **short-lived tipping** or otherwise activities that were not disturbed. **Sample** these as **extensively** as possible, as these can be used for dating the infilling process of the ring-ditch.
- Look for any **infill/ clean sand/ gravel layer** that could potentially **seal lower-lying occupation or abandonment deposits** → if identifiable, sample layers below sealing layer as per above.
- Record the **scoops, depressions, individual cut lines** within the ring-ditch area in great detail and with great care as a contour plan, because their **position, intercutting and stratigraphic relationship** can tell the **life-story of the ring-ditch use**, subsequent phases of use and re-cutting, and inform about the length of use of this part of the house (see Figure 4).

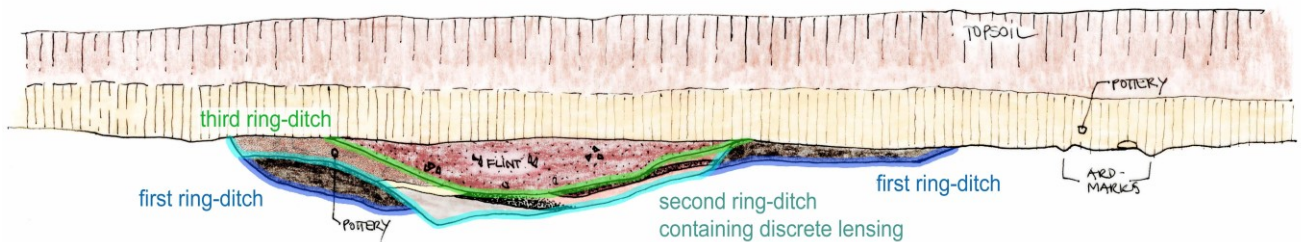


Figure 3 : Typical ring-ditch section. Drawing T Romankiewicz after Alexander 2000, Illus 9.

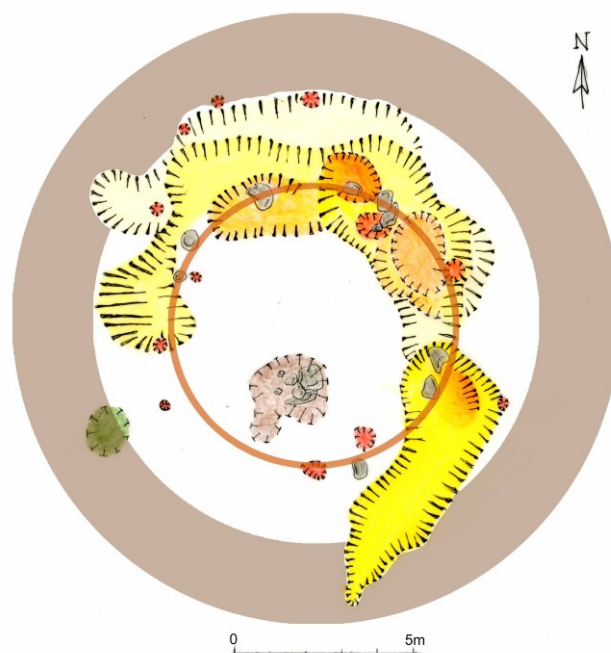


Figure 4 : Typical ring-ditch plan with intercutting scoops and hollows within turf wall.
Drawing T Romankiewicz after Cook & Dunbar 2008, Figure 53.

g. Sampling and Dating Strategy

Most roundhouses in NE Scotland contain little chronologically distinctive artefacts. **C14 dating** is currently our best option to obtain dates and reconstruct phasing. Therefore, **sample as much as possible from layers that contain charred remains**, even though they appear not particularly rich in burnt material. Based on considerations regarding portable analyses in the field and different levels and types of sampling, include a **full sampling strategy in your method statement**, and **review your strategy with progress of excavation**. Consult with the individual **specialists** for best results and best practice. **Sample** features **within and outwith** the footprint of the **house** to identify spread of collapsed superstructure, human activity/ work areas, animal pens, etc.

Remember that sampling posthole fills does not often yield secure material for dating, as the origin of the posthole fill is frequently unclear and can retain re-deposited material.

Definitely sample the post-pipe. While recording the stratigraphy of the posthole fill is important for understanding the taphonomy of the infilling processes and any possible repairs, the actual material within it (apart from small finds) has often limited value for dating. **Excavate the post-pipe separately and sample well**, but the posthole fills can be dug more quickly if time is of the essence. Then record the section in detail and **sample interesting fill contexts from the section**.

Overall consider the following:

- How much would be your minimal sampling compared to quantities dug?
- How much sub-sampling for important contexts?
- How much is sieved (wet, dry, flot)?
- How to evaluate topsoil?
- What are the site formation processes, in particular for structures that present sediment traps such as scooped floors and ring-ditches or the formation of sealed features?
- What are the possibilities offered by **Bayesian statistics**? Consult specialists about which contexts are most secure and effective for such analyses, and which contexts would offer the best potential to take multiple dates.

h. Roundhouse Within The Wider Landscape

Consider the **alignment of the entrance passage** towards cardinal directions and features in the surrounding landscape that could have been extant at the time of construction/ use. Record these.

Think beyond the house and other structures: how did this community use the landscape around the house to sustain themselves? **Survey the levels** of the original ground surface and think of **geoarchaeological techniques** such as micro-morphology and soil analyses to help answer such questions. **Make the best use of the full extent of your trench**.

i. Admit Defeat

Record evidence for **truncation** or **destruction** by later features/ animal disturbance/ ploughing/ modern activities → let this inform which contexts you sample and from which areas in order to avoid contamination.

Speculate about loss by truncation, and make it clear **how much of your interpretation of features is reconstructed**.

3. RECORDING AND REPORTING

Provide a general introduction on the roundhouse including the general points you recorded above, e.g. its situation in the landscape/ on site; aspect and entrance orientation, its construction (scooped, post-ring, turf wall); its main materials; its evidence for use (e.g. ring-ditch, pits).

a. Dimensions (presented in tabular format)

Describe dimensions in text and **table** (or table only) and **depict all details and context numbers discussed** on the **plan and section** (see 'Illustrations' below). If drawings become too cluttered present two versions: one with all numbers, one without.

- **External diameter** incl./ excl. thickness of outer wall (in relation to porch)
- **Post-ring diameter** (if present): measure from centre of post-pipe if extant, otherwise from centre of posthole
- Count **extant number of postholes** (and list all postholes with their feature numbers)
- **Projected number of postholes**, (i.e. reconstructed size of post-ring and postholes), speculate if necessary, based on distance between posts
- **Distance between postholes**: measure from centre of post-pipe if extant, otherwise from centre of posthole
- **Dimensions of postholes** (width, depth, shape, relation to centre point/ axis)
- **Dimensions of post-pipe** (width, depth, thin, vertical shadows to left and right of surviving post-pipe → this could be the decayed outer part of the post thus add to post-pipe dimension)
- Dimension of **stone packing** and description (angular, rounded, how tightly packed; give average diameter of stones, not just generic terms such as "medium-sized" or "small", even fist can be of very different sizes...) and describe and depict their three-dimensional location in relation to the post (see Figure 1 and 2).

b. Illustrations

DRAW AND PRESENT ALL PLANS AT THE SAME SCALE

INCLUDE NORTH ARROW POINTING TO TOP OF PAGE AND PRESENT PLAN ACCORDINGLY

- Present the **full plan** even if the roundhouse only partially survives, **stipple in the reconstructed diameter, and projected postholes** (especially if discussed in the text). The reader can then follow your discussion of the reconstructed elements.
- Place the plan with **site NORTH facing to the top of the page** and use a **standard scale** (either: 1:50: 1:100, 1:200, 1:250. 1:500; also for sections). In this way all structures can easily be compared visually, and dimensions not included in the text can be easily measured off the drawing.
- **Draw the post-pipes** on main plan and locate their position within the posthole (where extant).
- Present **ALL sections of post-ring postholes**.
- Present **at least one section** through the **ring-ditch**, but also the adjacent areas to illustrate differences in height between ditch, interior and exterior of the house (see Figure 3).
- Present a plan of the spatial distribution of artefacts and ecofacts (by type).

4. POST-EXCAVATION ASSESSMENT

Apart from standard artefact and ecofact analysis as agreed with the planning authority:

- Identify **ALL wood species** from structural features.
- Use **micro-morphology** samples, possibly phosphate and other trace element analyses.
- Consider **Bayesian analysis** for multiple radiocarbon dates if appropriate. Consult specialists before and during longer excavation and during post-excavation project design.

5. REFERENCE SELECTION

A special thank you for initial comments on the first drafts of this document to Derek Alexander, Ian Armit, Lindsey Büster, Martin Cook, Murray Cook, Andrew Dunwell, John Lawson, Stephanie Leith, Kevin Murphy, Charlie Murray, Hilary Murray, Ross Murray, Rachel Pope, Andrew Robertson, Andrea Smith and Val Turner.

General references on roundhouses, per different regions and image credits:

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- Armit I, MacKenzie J 2013. *An Inherited Place: Broxmouth Hillfort and the South-East Scottish Iron Age*. Edinburgh: Society of Antiquaries of Scotland.
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- Downes J (ed) 2012 *Chalcolithic and Bronze Age Scotland: ScARF Panel Report*. Scottish Archaeological Research Framework: Society of Antiquaries of Scotland. Available online at <http://tinyurl.com/clxgf5s>
- Dunwell A, Ralston IBM 2008, *Archaeology and Early History of Angus*, Stroud: Tempus/The History Press.
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- Pope R 2007, 'Ritual and the roundhouse: a critique of recent ideas on the use of domestic space in later British prehistory', in: *The Earlier Iron Age in Britain and the Near Continent*. C Haselgrove and R Pope (eds), Oxford: Oxbow, 204-228.
- Romankiewicz T 2011, *The complex roundhouses of the Scottish Iron Age*. BAR 550 (i) and (ii). Oxford: Archaeopress.

Good example of posthole recording:

Murray HK, Murray JC 2006 *Thainstone Business Park, Inverurie, Aberdeenshire*. [SAIR 21](#), Edinburgh: Society of Antiquaries of Scotland.

The perfect published excavation report has yet to be produced – make this your challenge!

Excavating Prehistoric Roundhouses

Guidance on good practice and effective outcome for future research: Table overview

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
1 - Pre-Excavation	survey prior to machinery on site (topographical, visual walkover and descriptions)	<ul style="list-style-type: none"> - to identify any visible remains pre-excitation, however subtle (upstanding banks, walls, lumps, or negative scoops, depressions, grooves, levels regarding water management and drainage issues, etc.). - to gain idea of house size, entrance orientation and general context of setting. 		
	description of known sites and monuments, as well as natural features in vicinity	<ul style="list-style-type: none"> - recording and understanding site in relation to other sites and monuments in area (earlier -> it may react to them; later-> they could react to house/ settlement). - understanding layout of house if it references natural or archaeological features. - identification of possibly available resources for building and site's economy. 		
	metal-detecting survey across area to be excavated	<ul style="list-style-type: none"> - to identify any ferrous and non-ferrous metal objects indicating later prehistoric activity. - to retrieve objects that could indicate status of settlement (e.g. high or low status metalwork present, or none) - and/ or to identify evidence for manufacture. <p>Although this material is ex situ and within topsoil, it was most likely ploughed up from underlying roundhouse.</p> <p>Walkover survey to scan for non-metal finds such as pottery, flint, slag, etc. can complement picture, as actual negative features in houses are often finds poor.</p>		
Site stripping	metal-detecting survey during stripping	if time allows, mechanically strip site in spits (20cm, i.e. less than 1ft = depth of reach of detector) and re-detect at each new level to identify further ferrous and non-ferrous metal objects (see above).		
Start of excavation	familiarisation with site specific issues	<ul style="list-style-type: none"> - understanding of excavation process as building roundhouse in reverse. - anticipation of patterns of collapse: roof typically collapses first onto floor layers and upper floors, walls typically collapse on top of roof. - anticipation of site taphonomy: what material is preserved in negative features: occupation, building, redeposited material from activities elsewhere? - anticipation of evidence for abandonment: accidental or deliberate destruction, gradual decay, salvaging of materials. 		

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
	expose full roundhouse footprint	<ul style="list-style-type: none"> - to identify entire house diameter, all construction elements, postering and number of posts in particular and any spatial division. - to calculate percentage taken up by central area and by peripheral area: Peter Hill's ratio: 33% peripheral space; 66% central; Rachel Pope's ratio: 40% / 60%. 		
	explore/ expose wider area beyond immediate diameter of roundhouse	<ul style="list-style-type: none"> - to identify associated features such as porch structure and its relation to outer wall: projecting porch or indicating thickness of turf wall. - to identify hollows/ pits which could have received roof rafters. Their distance from outer wall in relation to typical 45° roof angle allows reconstructing outer wall height and roof height (or do such features suggest a lower/ steeper roof pitch?). - identify other associated features that could be contemporary to understand use of house: depressions under eaves could result from sheltering/ stalling animals outside, pits with foundation deposits, drip gullies along eaves, etc. - can similar-sized, similar-filled features be associated to form structures? - what other characteristics or patterns could link such features? - how do they relate to roundhouse? 		
2 - Main excavation	identify outer wall line and its construction elements	different materials and constructions, also in combination: turf wall with or without stake/ wattle wall lining (with or without daub) indicated by stakeholes, grooves, slots, stone packing, larger postholes, etc.		
	section postholes radially, following line of structural forces within roundhouse	<ul style="list-style-type: none"> - to show any structural settling or deformation within posthole. - to understand roundhouse superstructure. - see Murray & Murray 2006 for what information can be gained. 		
	record size and position of stone packing in posthole in relation to post-pipe	- to help clarify how much structural knowledge builders had, and how well they understood how to compensate for structural forces within the timber frame: was post placed against subsoil or stone packing to keep it upright against the distortion caused by load onto post.		
	record subsoil condition, in particular in relation to weather conditions when excavating	<ul style="list-style-type: none"> - prehistoric builders would have faced similar problems such as loose subsoil collapsing into posthole; wet, heavy clayey soil difficult to excavate, etc. - did they make use of drainage properties of naturally occurring gravel or sand, which would have kept the post dry? - did they deliberately fill in a lowest layer of sand or gravel for that reason? - is there evidence for having charred the post before insertion → in form of thin charcoal spread or thin charcoal circle/ halo outlining size of post. 		

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
Post-pipe formation processes	identify post-pipe	<ul style="list-style-type: none"> - sharpness of post-pipe indicates post rotted in situ. - blurring or edges at top and bottom might indicate that post was removed by moving it backwards and forward to loosen it from packing. - recut in upper part of posthole to retrieve post? - flat stone slit into upper part of posthole to support rotting post base with post pad? - health warning: not all posts are necessarily round – split trees were used as well. 		
	sample post-pipe material 100%	<ul style="list-style-type: none"> - post-pipe presents secure trap for material derived from use of house; secure dates can be gained from small, short-lived material (cereal grains, roundwood, nut shells etc.). These could have entered post-pipe cavities created by rotting post, particularly at top of post-pipe fill. This material dates use of house, while charred post remains will date its construction (beware of reused posts). - if evidence for post removal survives, this area can also contain materials that trickled in at time of post removal. - 100% sampling allows identification of wood species used for main structural timbers. Different timbers have different structural or technical properties; species ID helps to understand whether certain timbers were preferred for certain tasks. 		
	<ul style="list-style-type: none"> - small-find charcoal fragments - record number of rings and possible diameter of original wood size - put each hand retrieved charcoal find into a separate bag 	<ul style="list-style-type: none"> - charcoal is fragile; the more detail is recorded when piece is intact the better: count rings visible, record fragment size, estimate original diameter of wood piece, sketch fragments as soon after lifting as possible - wrap pieces in tin foil as fragments are likely to break up in subsequent processing. - do not rely on this information to be recorded in post-ex lab. - keeping each piece separate allows for single entity dating, even if fragment subsequently broke into smaller pieces. If mixed with other fragments, single entities cannot be re-established if pieces break up. 		
Posthole construction and formation	detailed description of different fills of posthole and recording of grain size for fills.	<ul style="list-style-type: none"> - comparison of this information with surrounding subsoil helps identifying whether a deliberate infill was prepared to allow better drainage and reduce post rot. - evidence for any lining of posthole sides with ash/ charcoal smear/ clay/ stones → could indicate measures to preserve post from rot, and deliberate attempts for building long-lived structure. 		

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
Internal features	identify central hearth or cooking pit and sample extensively	<ul style="list-style-type: none"> - sample each layer and lenses separately. - is there possibility for micromorphology to understand hearth formation processes or cooking processes within a pit? - hearths and cooking pits are often reused, rebuilt, recut and can contain the life story of house, how long it was used for, in how many sequences/ phases, etc. - target these features for dating and macroplant analysis. 		
	are floor layers surviving?	<ul style="list-style-type: none"> - sample each layer and lenses separately - is there possibility for micromorphology to understand floor built-up? - discrete patches or lensing result from single, short-lived activities; more promising for dating than general fills that could contain redeposited material or trample contaminated from outside. Entrance areas more problematic than "dark corners". 		
	in which quadrant (NE, NW, SE, SW) and in what relation to main entrance do features concentrate, which ones are void of feature	<ul style="list-style-type: none"> - to identify patterns of use of space and activity areas - are features placed in line with a central axis through entrance; perpendicular to this axis, or both? May indicate underlying cultural practices for use of space. - if recurrent in other houses, this indicates trends of spatial use, at least for one site - what functions could these features have had? internal partitioning? built in furniture/ loom? - record depth and size of features to identify possibly related/ similar features. - take account of truncation across house; this can vary downslope/ upslope. - could any of these features have a function in construction or repair of house for possible processes during construction, use and abandonment? - look out for related features, such as smaller postholes/ pits adjacent to post-ring posts that could indicate props or stud support during construction or post replacement/ repair, temporary support for ring-beam, etc. - evidence for elongated slots can indicate easing the slipping of post into posthole (or an accidental formation of such slots when post is put in place) 		
	internal floor layers, external areas of activity	<ul style="list-style-type: none"> - undertake pXRF of chemical elements, in particular phosphate analysis, within house, but also within entrance, outside entrance, outside house – think of human activity areas, midden piles, latrines, sheep sheltering under eaves, etc. 		

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
	artefact and ecofact distribution	<ul style="list-style-type: none"> - every artefact or ecofact contains precious information about use patterns. - record their distribution in 3D - comment whether this appears to be accidental loss or deliberate placing. - pay particular attention to artefacts and their position when excavating postholes, in particular entrance postholes or thresholds, etc. 		
Ring-ditch stratigraphy	consider formation processes	<ul style="list-style-type: none"> - ring-ditch fills may not represent primary infill, but act as traps for sediments, remains from structural collapse or secondary material - is it a single phase fill or several phases of infill? → excavate discrete lenses and sample (see under floor above). - single fill: occupation deposit? destruction deposit? left open to elements and gradual silting up? deliberate infilling from a nearby site or midden? post-deposition homogenisation of infill by prehistoric (or later) ploughing? - any remains/ residues of original occupation deposits should have a grab (for soil analysis such as phosphates, phytoliths, and for hand-retrieving datable material in course of analysis) and ideally a micromorphology sample, plus bulk sample if sufficient material survives; - discrete lensing could indicate small-scale, short-lived tipping or otherwise activities that were not disturbed. Sample as extensively as possible, as these can be used for dating infilling process of ring-ditch. - ideally produce an overlapping sequence of micromorphology samples of full ring-ditch fill sequence, or at least of lowest layer at interface with natural. - any infill/ clean sand/ gravel layer could potentially seal lower-lying occupation deposits → if identifiable, sample layers below sealing layer as per above, as these result from an earlier use or abandonment of ring-ditch. 		

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
	draw detailed topographical plan of ring-ditch formation, recording all scoops, cuts, and depressions, wear etc. by using hachure shading	- record scoops, depressions, individual cut lines within ring-ditch area in great detail and with great care; their position, intercutting and stratigraphic relationship can tell life-story of ring-ditch use, subsequent phases of use and re-cutting, and inform about length of use of this part of house (see Figure 4).		
Sampling and dating strategy	prepare a full sampling strategy with your method statement: - How much would be your minimal sampling compared to quantities dug? - How much sub-sampling for important contexts? - How much is sieved (wet, dry, flot)? - How to evaluate topsoil?	- ideally process samples on site to allow a review of strategy with progress of excavation: yielding enough material? targeting right contexts? method efficient? - consult with individual specialists for best results and best practice. - sample within and outwith footprint of house to identify spread of collapsed superstructure, human activity/ work areas, animal pens, etc. - consider portable analyses in field and different levels and types of sampling, as every method backs up evidence from another (or contradicts it), which renders interpretations more reliable (multi-proxy approach). - record evidence for truncation or destruction by later features/ animal disturbance/ ploughing/ modern development → let this inform which contexts you sample and from which area in order to avoid contamination.		
	assess site for potential to apply Bayesian statistical modelling	- consult Bayesian specialists about which contexts are most secure and effective, and which contexts would offer best potential to take multiple dates - in discussion with them, consider site formation processes, in particular for structures that present sediment traps such as scooped floors and ring-ditches or formation of sealed features, to be sure you are not dating redeposited material.		
Roundhouse within the wider landscape	consider the entrance passage alignment	- consider alignment to cardinal directions but also surrounding landscape features to contextualise the setting of the house as these may have guided the prehistoric builders. Which ones could have been extant at the time?		
	think beyond the house: survey and geoarchaeological analyses	- levelling the original ground surface can help to reconstruct ancient topographies and inform about possible land use and water management - geoarchaeological techniques such as micro-morphology and soil analyses help answer landuse questions. Make best use of the full extent of your trench.		

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
3 - Recording and Reporting	general description of roundhouse	<ul style="list-style-type: none"> - to introduce roundhouse in text with general aspects (orientation, construction, materials, use) - leave details such as dimensions for next section, which ideally can be presented in tabular form 		
	feature dimensions presented in tabular form: <ul style="list-style-type: none"> - to ensure that each data are presented systematically for all features - text descriptions/ narratives often omit details to render text more readable - tabular overview allows easy re-assessment by other researchers 	<ul style="list-style-type: none"> - External diameter incl./ excl. thickness of outer wall (in relation to porch). - Post-ring diameter (if present): measure from centre of post-pipe if extant, otherwise from centre of posthole. - Count extant number of postholes (list all postholes with their feature numbers). - Distance between postholes: measure from centre of post-pipe if extant, otherwise from centre of posthole. - Projected number of postholes, i.e. reconstructed size of post-ring and postholes), speculate if necessary, based on distance between posts. - Dimensions of postholes (width, depth, shape, relation to centre point/ axis through entrance). - Dimensions of post-pipe (width, depth, thin, vertical shadows to left and right of surviving post-pipe - this could be the decayed outer part of post thus add to post-pipe dimension). - Dimension of stone packing and description (angular, rounded, how tightly packed; give average diameter of stones, not just generic terms such as "medium-sized" or "small", even fists can be of very different sizes...) and describe and depict their location in relation to post (see Figure 2). 		
	locate/ identify ALL contexts and features discussed in text and table on plan and/ or section	<ul style="list-style-type: none"> - reader cannot follow your description if they cannot locate features. - if drawings become too cluttered present two versions: one with all numbers, one without. 		
Illustrations	plans: north arrow pointing to top of page	<ul style="list-style-type: none"> - easy assessment for reader where features are located. - easy comparison of different features as they are all shown with same orientation - resist turning plan in order to better fit paper size: standard orientation is important for comparison – changes in orientation cause confusion. 		

Phase of work	Task	Why It Makes Sense	Excavator's Notes	OK
Illustrations (<i>continued</i>)	plans and sections: draw at SAME scale and to standard scale (either: 1:50: 1:100, 1:200, 1:250. 1:500)	- easy comparison of different features as they are all shown at same scale. - standard scales allow for easily measuring dimensions off the drawing, which may not be mentioned in text.		
	plans: draw post-pipes on main plan and locate their position within posthole (where extant)	- drawings illustrate your descriptions and allow reader to check and compare dimensions of post-rings, post-pipes, etc.		
	sections: present ALL sections of main postholes	- drawings illustrate your descriptions and allow reader to check and compare		
	sections: present at least one section through ring-ditch, but also adjacent areas to illustrate differences in height	- drawings illustrate your descriptions and allow reader to check and compare		
Interpretation	speculate about loss by truncation, and make it clear how much of your interpretation of features is reconstructed	- makes it easier for others to follow your argument, and separate surviving evidence from interpretation. - level of truncation is important to judge interpretation of postholes, dimensions of superstructure, etc.		
4 - Post-Excavation Analysis (in addition to standard procedure)	identify ALL wood species from structural features.	- this allows to reconstruct which trees they were using for structural elements (see comments above).		
	use micromorphology samples	- to inform about layer formation and use of house.		
	consider Bayesian analysis for multiple radiocarbon dates if appropriate	- consult specialists before and during longer excavation and during post-excavation project design to be responsive and flexible in your sampling and processing, and to minimise costs for not analysing unsuccessful samples.		

Guidance on good practice and effective outcome for future research: Flow Chart

check main document for further details on tasks and reasoning

