Reviewer 1

The purpose of Journal of Archaeology and Ancient History, JAAH, is according to Guidelines for referees to “refer to an archaeological or historical question in which it would be beneficial to suggest a new research front or angle or revision”.

I am pleased to state that the article Exploring a Corpus of Late Iron Age and Early Medieval Brooches from the Limfjord region, Northern Jutland well fulfils the purpose of suggesting a new research front, especially as this apparently is part of an ongoing PhD project.

The immense record of metal-detected finds, mainly from the first millennium AD and first and foremost so far from South Scandinavia, forms a most important source for knowledge on several aspects of society such as metal handicraft, local and external contacts, networks, costume traditions, settlement organisation etc. Most important is that the material retrieved with metal-detecting in several aspects differ from that known from i.a. graves, and thus contributes with new aspects to our understanding of Iron age society.
Thus, it is to welcome that the author has made the effort to analyse a large number of brooches, 1859 pieces, from a defined region in order to discuss various aspects of the record.

The data is collected from the local museums in the survey area. Here I would have liked a more comprehensive description of the record, something about the museums documentation, card index, standard of photos, digitalising etc. In addition, the methodology should have been described more comprehensively (not only in footnotes). Did the author work only with digitalized record or handled documentation at the various museums? To what extent is detector-retrieved material photographed? Obviously, the author has only to a restricted degree seen the actual objects, which of course is defensible in a pilot study. However, the result is that several important questions here only could be discussed in a general way.

The article gives a survey of the chronological frequency of various types of brooches, Tab. 1. An important and interesting point is the chronological variation in number of brooches as well as the degree of standardisation and quality. This is valuable information and the results are in good concordance with what is known from other areas in South Scandinavia and is a promising theme for further research.

One theme of the article is discussion on production. The author claims a widespread production on many sites across the region. The hypothesis is well argued for and also seems probable. However, to discuss these important aspects it is necessary to scrutinize the brooches. Especially the back-sides of them often show important information as workshop traditions or mode of production.

One important discussion concerns the reasons of fragmentation. The main possibilities are whether the objects are deliberately divided or if is the result of agricultural activities. Also, here an analysis of the very objects is necessary in order to settle whether they are broken or cut. With Thus, according to my view, it is crucial to study the objects themselves in order to get further. However, as this is a pilot study it should be taken as a recommendation for the future.

It is important that the author points at the varied standards of documentation at the museums. This is a task for the museums to make the material from detector investigations usable.

Another important point is the varying conditions for preservation due to soil types, which is of crucial importance when comparing different regions.

Some minor remarks:
Fig. 2, 3, 6. Is it possible to include size of the objects and provenience?
p. 14. *Coarse*, and p. 29. *Quality*. Is it desirable that these terms are defined more precisely.
p. 30. “The brooches are most abundant…. “ Exactly the period when the brooches, or fragments of brooches are most abundant is the very period when alloys are characterized by recycling (Jouttojärvi). Thus, it is possible to argue that extensive use of scrap metal is the prerequisite for the large production.

The article is important as it raises a number of fundamental questions on an archaeological material with immense potential, but which has so far not received the attention it deserves. The strength of the article is that it is based on a large material. The author also discusses various interpretations on important questions. However, as this is a work that “would be beneficial to suggest a new research front or angle or revision” it would have been appropriate also to discuss how future work might proceed.

I think this manuscript can be published.
Reviewer 2

Review: Exploring a Corpus of Late Iron Age and Early Medieval Brooches from the Limfjord region, Northern Jutland.

This is a very interesting paper, which charts the production, use and deposition of female brooches over a long time-span (400-1150 AD) in the region of the Limfjord. It is based on a novel and extensive dataset, and results in new findings (particularly regarding object fragmentation and distribution patterns) that will be of interest to period-specific archaeologists and all those engaged in metal-detector-based research. I have some suggestions for improvement. Overall, the paper needs clearer signposting/ statements about what it is going to do, greater confidence in the data and perhaps a new title.

An underlying question that the author hints at, but does not address is: why are there so many brooches relative to other types of metalwork? Presumably these sites are not inhabited only by well-dressed women. Why is male dress less in evidence? This is particularly the case from the Early Germanic Age, with brooches representing over 90% of all metal-detector finds. Does this relate to the quantities of ornamental metalwork worn by men and women, and the nature of those artefacts? Or does it relate to work women specifically are doing whilst wearing these items?

Also, how do the overall brooch numbers reflect the different site functions, which are relatively well-established for this area? Can we see a difference between ‘specialised landing places’ and regular agrarian settlements, for instance? This might also feed into the contexts of brooch loss.

The author rightly points out the limitations of the data, but perhaps takes this too far. There is a certain lack of confidence in the dataset and the conclusions that can be drawn, but this is an extensive body of data, relatively well-dated, with broadly good locational data. I would inject a bit of enthusiasm for what it can tell us!

Specific comments

Title: This is rather vague at present, and doesn’t give a sense of what the article is doing. Perhaps something along the lines of: Metal-detected Late Iron Age and Early Medieval Brooches from the Limfjord region: production, use and loss.
p. 3 ‘excessive number of brooches’. I don’t think any patterning can be excessive. Under all circumstances, it will only represent a small proportion of the number of items originally in circulation.

Table 1: I appreciate that the time periods are split by conventional date brackets – but if the brooches have been assigned to a 25 year period, it would be useful to see that in the data. This would help to correct for the uneven distribution of the chronology (one bar representing 70 years, another 150).

p. 21 Production and distribution section. I got a little lost here – consider subheadings for each brooch group and starting each section with a sentence about the main finding, before going on to give the detail. It would be useful here to bring in Soren Sindbaek’s work on oval brooch production and its links to particular towns and regional identities. Indeed, the author could talk more directly about the growth of towns and the impact of towns on manufacturing – if only to argue against this commonly linked phenomenon.

Table 7. It would be useful to distinguish between Vang and Vestervig and the other charts to reinforce the point made about different local conditions and states of preservation between these sites.

p. 39. Random loss or deliberate deposition? This section needs a clearer starting sentence about what it will do and show.

p. 40 Very interesting discussion of Østergård – a plan of the site and detector finds would be helpful. Consider moving footnote 34 to the main text.

p. 42 The author makes a point about brooch shape/ size affecting their likelihood of loss. S/he can show this from their own data – all the oval brooches recorded are fragmented, presumably because whole oval brooches were always picked up when dropped.

p. 42 ‘it is equally likely that some of the wisely scattered brooches were in fact deliberately deposited’. This seems to contradict the flow of argument – it is sufficient to acknowledge that deliberate deposition is possible in some cases. On the subject of brooch hoards, the author could refer to The Ritual Use of Brooches in Early Medieval Forts on Öland, Sweden, by Jan-Henrik Fallgren & John Ljungkvist. European Journal of Archaeology Vol. 19 (2016).

Conclusion: could be more succinct.
Author’s comments

I would like to thank both peer-reviewers for accepting the considerable task of reading and commenting on my lengthy paper. I have done my best to adjust it according to most of their insightful suggestions for improvements.

On recommendation, I have tried to strengthen the cohesiveness of the chapters and elaborated on some of the basic methodological aspects. Furthermore, I have added details to a few central discussions. Most importantly, the section about manuring strategies and local distribution of brooches have been revised. However, this subject is far from exhausted; also in this respect, the research presented here is clearly in its juvenile stage. The study of former land exploitation patterns is probably one of the areas in which the metal detector finds will supply decisive new insights in the future.

In addition, the paper has been supplemented with an appendix to provide a base for a thorough critical review of my work and, not least, a firm starting point for anyone who wants to carry out further studies on the brooches from the Limfjord region. Presenting the appendix was always the intention; It was, however, not included in the draft available to the peer-reviewers.

Finally, both peer-reviewers have pointed to different interesting approaches that may serve as inspiration for future studies. Hopefully someone will take on the task and pick up some of the many loose threads that my pilot study has left unexplored. I look forward to seeing the results.