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Preserving the Past in the Plough Zone Together: Hobby metal detecting in Innlandet County as a case of good practice within the Norwegian legal framework

Caroline Fredriksen, Anne Engesveen, Kjetil Skare, May-Tove Smiseth and Lars Pilø

This article presents and discusses the practice of Norwegian metal detecting from the perspective of Innlandet County. The authors perceive hobby metal detecting in Norway as an essentially good thing even with its downsides, and believe that a collaborative approach is the best way to preserve the past in the plough zone. The case study of the Innlandet practice is based on first-hand experiences of the Innlandet archaeologists. We present how the Innlandet practice has emerged, how archaeologists communicate with detectorists, and how the archaeological context of finds in the plough zone is understood. In our opinion, general in situ protection in the plough zone is the 'worst practice' within the Norwegian legal framework.

1. Introduction

During the last decade, Norwegian heritage institutions have handled a considerable amount of plough zone finds from hobby detectorists. Norway's eleven county administrations and the Saami parliament serve as first-line contacts for public finds. Innlandet County is among the counties handling most finds and encourages a collaborative approach to hobby detectorists. Our objective is to present and discuss Norwegian practice from the Innlandet perspective, focusing on historical development, communication with detectorists, and the archaeological context of metal-detected finds from the plough zone. The case study is based on first-hand experiences from archaeologists in the heritage unit in Innlandet County, working with detectorists and their finds. We discuss advantages and disadvantages of the Innlandet practice from a Norwegian perspective, and promote the Innlandet system as a model of good practice within the Norwegian legal framework.

2. Managing Metal Detecting in Norway

Heritage management is a development-led state monopoly in Norway, which aims to secure source material for research when development plans threaten heritage (Glørstad 2010, 29). Norwegian archaeology is a purely professional matter. Three types of heritage institutions manage cultural heritage on different levels, all subordinate to the Ministry of Climate and Environment. The Directorate of Cultural Heritage [DCH; NO:

Riksantikvaren] is at the top of the hierarchy, followed by eleven county administrations and the Saami parliament, and five university museums.

Norwegian cultural heritage is protected as '(...) part of our cultural heritage and identity and as part of comprehensive environmental and resource management' and should be preserved as 'scientific source material [our translation]' (The Act Concerning the Cultural Heritage 1978, §1). In a White Paper from 2020, the Norwegian perception of cultural heritage management as resource management is strengthened, and the term 'cultural-environmental management' is introduced to emphasise the connection to climate and environmental policies. The first of three new national goals states that 'Everyone shall have the opportunity to get involved in and assume responsibility for the cultural environment' (Meld. St. 16. (2019-2020), 8). The white paper underlines people's right to get involved in cultural heritage, emphasising cultural heritage and the cultural environment as a shared responsibility (Meld. St. 16. (2019-2020), 8). The central government is responsible for facilitating this goal.

In the Faro Convention, to which Norway is a signatory, cultural heritage is promoted as a resource for sustainable development. A key goal of the Faro Convention is increased democratisation, ensuring that everyone has the right to participate in the use and preservation of cultural heritage. This understanding of democratisation is used as an argument in the international debate on metal detecting, advocating for a collaborative approach to address the issues associated with private metal detecting (Dobat *et al*. 2020, 282). Norway is also a signatory to the Valletta Convention, which highlights the physical preservation of cultural heritage *in situ*. The concept of *in situ* preservation entails preserving cultural heritage at its original location.

The county administrations are first-line contacts for detectorists. They are responsible for receiving public finds and recording heritage sites within their jurisdiction. The university museums are responsible for recording and curating finds. The Act Concerning the Cultural Heritage [CHA] does not mention metal detecting. Nevertheless, portable artefacts pre-dating 1537 and coins pre-dating 1650 are considered state property and it is mandatory to report and hand these in to the authorities. Metal detecting is tolerated as long as automatically protected sites remain undisturbed. The CHA categorically separates *portable artefacts* and *automatically protected sites* (The Act Concerning the Cultural Heritage 1978, chapters 2-3). All traces of human activity older than 1537 in our physical environment are *automatically* protected (1650 for buildings and 1917 for traces of Saami activity). Section 4 of the CHA also includes site types that do not necessarily leave traces in the ground, such as sites of traditions, beliefs, legends, or customs (The Act Concerning the Cultural Heritage 1978, §4f). Sites covered by these age criteria are automatically protected by law, whether recorded by heritage authorities or not. It is illegal to initiate any activity that might damage or disturb an automatically protected site or create a risk of this happening (The Act Concerning the Cultural Heritage 1978, §3). Metal detecting and digging when a signal is detected is prohibited if one suspects the presence of an automatically protected site. However, CHA §3 makes an exception for farming, as farming is usually allowed to continue 'in the ground above' an automatically protected site. This substantial right for farmers, combined with the concept of *in situ* preservation as 'best practice', is questioned by both archaeologists and detectorists in regard to plough-zone finds (e g. Fredriksen 2019; 2021; Maixner 2015; Ravn 2014; Skre and Pilø 2016; see also Willems 2012).

Hedmark county administration (Innlandet County since 2020) initiated a discussion on common guidelines for hobby metal detecting in 2012 (Fredriksen 2023, 202). At this point, most Norwegian finds were recorded in counties covered by the Museum of Cultural History's jurisdiction (Fredriksen 2023, 204). The increase in reported finds accelerated later nationally, from 2014 onwards (Axelsen and Fredriksen 2024; Fredriksen 2023; for an

overview of discussions prior to 2012, see Axelsen 2021, 79-84). The question of when finds in the plough zone indicate the presence of automatically protected sites, as well as how such sites should be managed, was central to the consultation process for the Directorate for Cultural Heritage's *Guidelines for Private Use of Metal Detectors* (Fredriksen 2021).

The *Guidelines for Private Use of Metal Detectors* were published in 2017 (Riksantikvaren 2017). Consultative statements prior to this publication indicate that perceptions about both metal detecting and cultural heritage sites in the plough zone vary among heritage institutions (Fredriksen 2021). While some consider the presence of a few single finds in the plough zone as *automatically protected* sites, others consider archaeological structures underneath the plough zone as automatically protected. DCH's statements following the publication of the 2017 guidelines may have moved plough-zone finds closer to a position of automatically protected sites (Fredriksen 2021, 147). In a statement from 2020, DCH argues that automatically protected sites 'does not necessarily leave physical traces below the plough zone […] artefacts are in such cases the only traces left [our translation]' (Riksantikvaren 2020). As argued by Fredriksen (2021, 144-48) the work on a common practice for hobby metal detecting might have changed the perception of the concept *automatic protection* from specific site types as listed in the CHA §4, to the hypothetical presence of sites.

It is not clear whether artefacts in the plough zone represent fixed site types. Surveys on Norwegian plough-zone sites indicate that preserved archaeological contexts are sometimes present, while archaeologists rarely can establish a relationship between plough-zone finds and *in situ* contexts (e.g. Fredriksen and Stamnes 2019; Dahle *et al*. 2019; Tonning *et al*. 2017; Sand-Eriksen *et al*. 2020). A survey from Innlandet concluded that finds in the plough zone indicate the presence of prehistoric sites nearby at best (Sand-Eriksen *et al*. 2020). According to DCH, sites with several chronologically related artefacts should be registered as automatically protected (Riksantikvaren 2020). We believe this restrictive perception of automatically protected sites is likely to limit the empirical evidence necessary to manage plough-zone sites, simultaneously limiting their potential as archaeological sources. Turning to our case, Innlandet, it is essential to keep in mind that although common guidelines for hobby metal detecting exist, there is no common practice among Norwegian county councils on how to record plough-zone sites. This is reflected in protection labels recorded on metal detected sites in the heritage site database *Askeladden* (Figure 1). From four site labels, *automatically protected, unresolved, not protected* and *removed*, Innlandet is one of only three county councils that seem to prefer the *not protected* label on plough-zone sites. Why does the Innlandet policy differ from others?

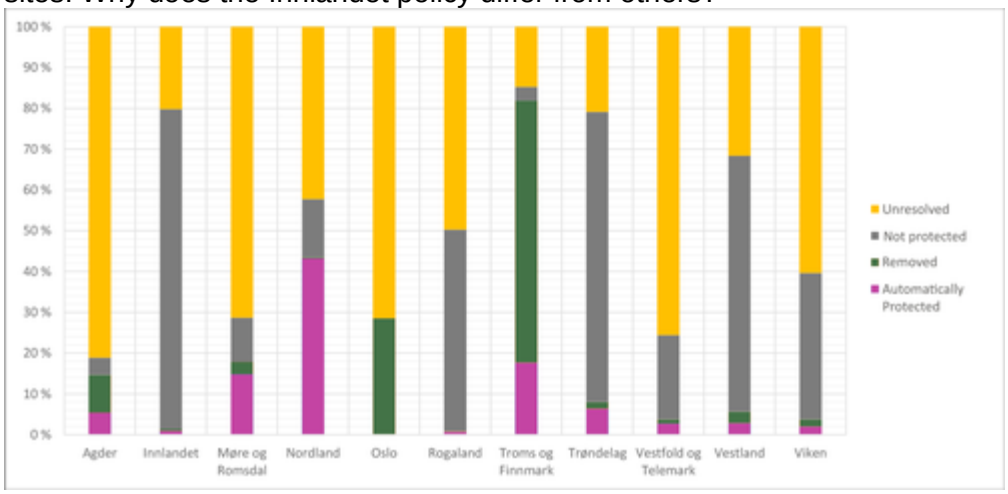

Figure 1: The protection status of sites recorded by metal detecting in Norwegian Counties, 30.1.2020. Due to significant differences in numbers of finds per county, the percentage distribution of each protection status label is given. Image credit: Caroline Fredriksen

The Act Concerning the Cultural Heritage establishes a framework for how detectorists and their finds should be treated. Cultural heritage management in Innlandet is based on this framework, and on local knowledge of the origin of metal-detected finds, analyses of find assemblages, and test excavations.

3. Innlandet County — a case study

Innlandet County is situated in the heart of southern Norway (Figure 2). The area was known as Upplond in the medieval period but was split into two administrative units in the 18th century, which were later named Hedmark and Oppland. In a 2020 administrative reform, these two counties were reunited as Innlandet County. The Cultural Heritage Department at the Innlandet County Council is located at Lillehammer.

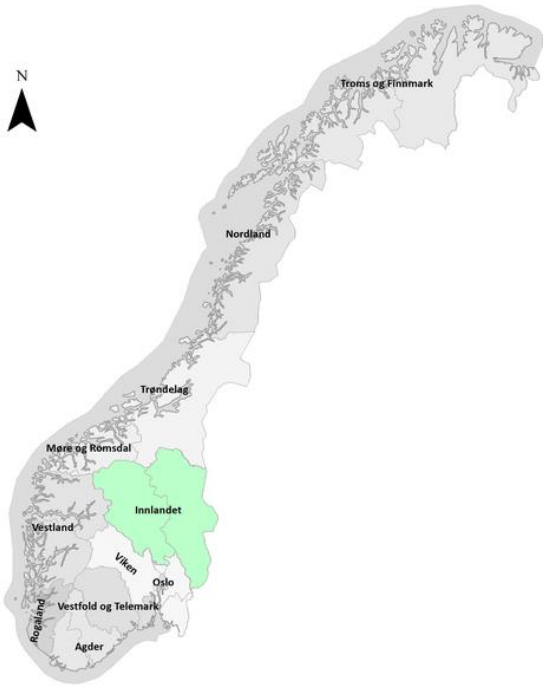

Figure 2: A map of Norway with Innlandet County marked. Image credit: Caroline Fredriksen

Innlandet covers 52,000 km² and has a varied topography. Only 4.3% of the county is arable land. The southernmost part is an open landscape that contains large contiguous agricultural areas. The northernmost part has valleys with farms surrounded by mountains. Some of the mountain areas are glaciated and extend to above 2000m. With such a diverse topography, it is no wonder that the archaeology of Innlandet is also quite varied according to location — from Iron Age graves in the farmed areas, especially from the Roman Iron Age (1-350 CE) and the Late Iron Age (550-1050 CE) (e.g. Herteig 1955; Pilø 2005), to prehistoric hunting sites exposed by melting ice in the high mountains (Pilø *et al*. 2018). Most known archaeological finds are from the farmed areas. Only a few settlement sites have been investigated. Before metal-detected finds began to be reported in larger numbers a decade ago, metal finds from the Bronze Age and the Pre-Roman Iron Age were very few.

3.1 The history of hobby metal detecting in Innlandet County

The earliest finds from hobby metal detecting in Innlandet are from the 1980s, but the number of reported metal-detected finds started to pick up around 2014. Oppland County Council got actively involved in detector archaeology from 2012 onwards. In the beginning, the efforts focused on encouraging detectorists to stick to detecting in the ploughzone, and not below the plough layer, or in forests and mountains, as there had been a few unfortunate cases where detectorists had dug their way into undisturbed graves.

Oppland was the first county council in Norway to provide public guidelines for detectorists (from 2012). The local guidelines recommended using GPS for recording finds and keeping 50m away from recorded monuments. The 50m distance to recorded monuments may seem overly cautious, but this recommendation was based on the sometimes low precision of the monuments map. By keeping a distance from known monuments, chances were smaller that detectorists would inadvertently break the law in pursuit of their hobby.

Inspired by the Portable Antiquities Scheme, Oppland County Council established a system with a Finds Liaison Officer from 2014 who handled all the finds and enquiries from the detectorists. This ensured standardised treatment of detectorists and their finds — at this time there was quite a bit of variation in the management of detector finds in other counties. The Oppland practice was implemented in Innlandet County from 2020 onwards.

After a steady rise from 2014 onwards, the number of reported finds in Innlandet appears to be levelling off, or even dropping in recent years. Based on the number of finds reports received since 2020, the decline is probably real even if many of the finds are still not processed.

There are 4725 recorded detector finds reported to Innlandet County Council registered at the Museum of Cultural History as of 31 May 2023 (Figure 3). The total number of finds processed at the Innlandet heritage unit, including 2022 and 2023, is approximately 7400 finds. Considering the number of finds recorded at the university museums so far, Innlandet County is in second place among the Norwegian counties, only surpassed by Viken (Figure 3).

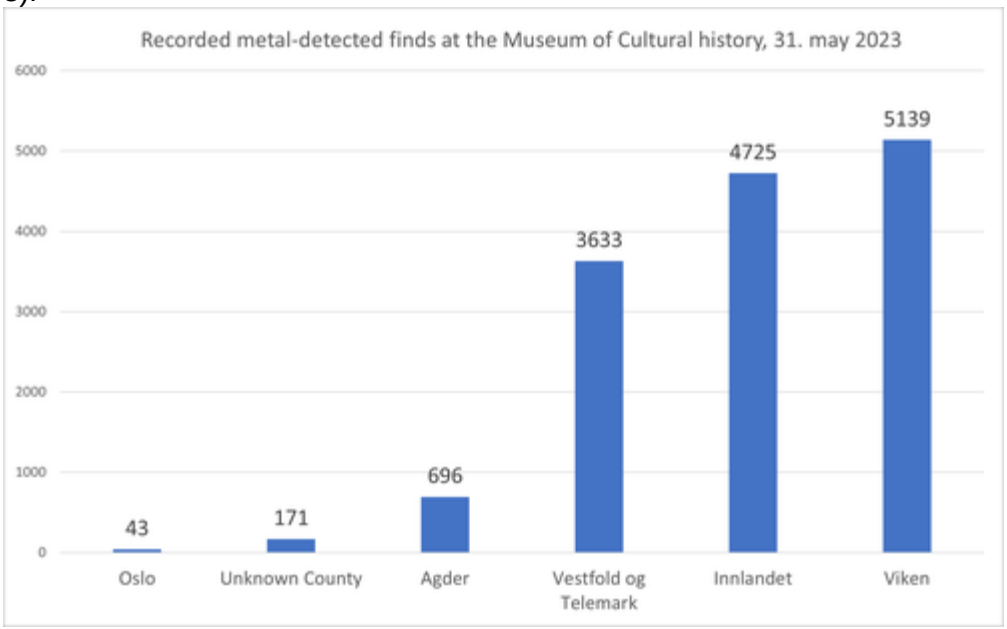

Figure 3: Number of finds per county in the Museum of Cultural History's jurisdiction. Being one of five University museums in Norway, its jurisdiction covers 5 out of 11 counties. Image credit: Caroline Fredriksen

3.2 The interaction between detectorists and archaeologists in Innlandet County

Innlandet has arranged annual meetings for local detectorists since 2016 (Figure 4). These meetings include one or two presentations on archaeology, often based on local metal-detected finds. Later, the county archaeologists present rules and regulations for public metal detecting. There is ample time for questions and discussions during these presentations. The detectorists get a certificate showing that they have participated in the

rules and regulations section. They can show this certificate to farmers when they ask for permissions.

Figure 4: The 2020 detector meeting in Innlandet, held on the historic Åker farm near Hamar. Photo: Anne Engesveen

The county archaeologists also try to increase the detectorists' understanding of the dos and don'ts of archaeological surveys to improve the quality of the metal-detected record. The message of the Innlandet heritage unit to detectorists is to survey systematically and use a track log. There has been a clear change over time towards better archaeological practices among the Innlandet detectorists.

In addition to the annual meetings, the Innlandet heritage unit administrates a closed Facebook group for local detectorists and archaeologists. The group has around 100 members. The archaeologists share new information and discuss various matters related to local metal detecting. Relevant scientific papers on artefacts are also posted in the group. In addition, the Innlandet heritage unit has a public Facebook page, where the unit shares metal-detected finds and other posts on cultural heritage. This page has contributed to bringing forward information about artefacts, archaeology and the detectorists themselves in local media.

Finally, the Innlandet archaeologists spend time talking with detectorists; for example when they deliver their finds or during club rallies. Archaeologists are also available outside normal working hours, which is important as detectorists may sometimes become unsure whether they can continue their search or not. The moment a find or find assemblage indicates e.g. a disturbed grave or a hoard, digging must stop and the find spot is assumed to be a protected monument. However, such clear find situations are rare in Innlandet. Normally, detectorists call when they feel that they are entering a legal grey zone. They might have made certain finds in the plough zone within a limited area and ask whether they should stop or not. The archaeologist at the other end then decides whether it is a go or no-go. If there is no archaeologist available, then it is a no-go.

Hobby detectorists have become an integral part of the archaeological surveys in Innlandet. They check the topsoil for finds during evaluation trenching. This is mostly done as a paid assignment. The main reason for doing this is to document whether there are artefacts in the plough zone over sites, and if such artefacts can be related to the site below.

There are usually one or two large detector rallies in Innlandet each year. They are held by national or local clubs. This brings a large number of detectorists (up to 60-80) with varying experience onto a limited area at the same time. The heritage unit gets informed ahead of time about the farms that will be visited during the rallies. There is then a dialogue between the organisers and the heritage unit if there are certain parts of the fields where it is not advisable that massive detector searches are conducted. An individual detectorist will know whether the finds made show that he/she should stop detecting and contact the heritage unit because they may be on a protected site. This is much harder if you have dozens of detectorists working in an area at the same time.

3.3 The archaeological context of metal-detected plough-zone finds in Innlandet
If all plough-zone finds originated from automatically protected sites below the find spots, the CHA would demand that detectorists stop after one or a few finds. In the early phases of Norwegian hobby metal detecting, many Norwegian archaeologists presumed that there was a relationship between finds in the plough zone and preserved structures underneath. This was a die-hard conviction in Norwegian archaeology, which has only recently started to change, as there has been a knowledge transfer to Norway on how the origin of detector finds is viewed in other countries. Independent Norwegian empirical evidence has also been developed.

Mogens Bo Henriksen has put forward criteria for identifying the processes leading to the accumulation of find assemblages in the plough zone, which form the basis of Innlandet's understanding of the origin of the detector finds. Henriksen (2016) divides the processes into five categories:

1. Accidental losses over time. This will produce find assemblages with variation among the recovered artefacts and an emphasis on dress accessories. The finds will have a wide chronological range and show varying degrees of wear.
2. Accidental losses during a short period of time or on a number of occasions. This will result in artefact assemblages with few types and a narrow chronological range, typically market sites.
3. Intentional deposition in one act, typically graves and hoards.
4. Successive depositions in one place, typically religious in nature.
5. Secondary deposits and contamination, e.g. secondarily deposited with manure.

Accidental losses of category 1 and redeposited material of category 5 can hardly form the basis for labelling find spots as automatically protected sites. The fields of the central agricultural areas in Innlandet have many traces of human activity, not only metal objects, but also lithics and other stone materials, fire-cracked stones (which in many cases are dated to the Late Iron Age and medieval period), bone, and other remains. Protecting such find spots would quickly lead to very extensive protections, potentially covering most of the central farming areas. We do not believe this is the intention of the law.

Detector finds of categories 2-4 can form the basis for labelling find spots as automatically protected sites. Category 3 is present in Innlandet, albeit uncommon, while categories 2 and 4 are rare. Category 3 find spots in Innlandet reveal themselves as, for instance, iron weapons in part of a field (an indication of a Viking Age cemetery) or two gold finger rings found 8m from each other (a Roman Iron Age grave or hoard). Even rarer are instances where the detectorist continues digging below the plough zone to follow signals, eventually encountering an intact archaeological context of category 3. One of only two known examples of this is a hoard of smithing equipment found in 2014, dated to c. 600 CE at

Storhov in Elverum municipality (Post-Melbye and Rundberget 2020; Sand-Eriksen *et al*. 2020, see below).

A metal-detected find may originate from disturbed archaeological contexts below the find spot, and when there are good indications that they do, the find spot is labelled as automatically protected and metal detecting is prohibited. However, most plough-zone assemblages from Innlandet are very different from such concentrations of chronologically contemporary finds. A typical plough-zone assemblage in Innlandet consists of dozens of chronologically separate artefacts, scattered over the fields of a farm (Figure 5, Figure 6). In such cases there are no clear find concentrations. Generally, the plough-zone assemblages from Innlandet consists of copper-alloy brooches, coins, lead spindle whorls, lead weights and other small finds. This corresponds to the general national picture of typical plough-zone finds (Sand-Eriksen *et al*. 2020; Fredriksen 2023, 224-25). Overall, the Innlandet finds appear to be typical of Henriksen's category 1 and 5 find assemblages.

Figure 5: A typical find assemblage found on the Herset farm, Hamar municipality, by detectorist Øivind Moe 2016-2023. The farm is first mentioned in historical sources in 1593. No known finds came from the farm prior to the detector search. The farm name suggests a Late Iron Age (550-1050 CE) origin, but there are three fragments of brooches and a buckle belonging to the Migration Period (350-550 CE) among the finds, suggesting an earlier date. Not to scale. Photos: Øivind Moe

The Innlandet metal-detected finds are similar in character to what is found elsewhere in Norway, and for instance in Denmark and the United Kingdom (Christiansen 2017; 2019; 2020; McLean and Richardson 2010). A recent comprehensive analysis of such finds in Northern Jutland by Torben Trier Christiansen (2020) demonstrates that most of the finds in this region derive from two main contexts: they are either from ploughed-out settlement sites (Henriksen category 1) or from the fields surrounding such settlements (Henriksen category 1 and 5) and are considered accidental losses. Redeposition of artefacts as part of the manuring of fields surrounding the farm settlements is also known from England (Levick and Sumnall 2007).

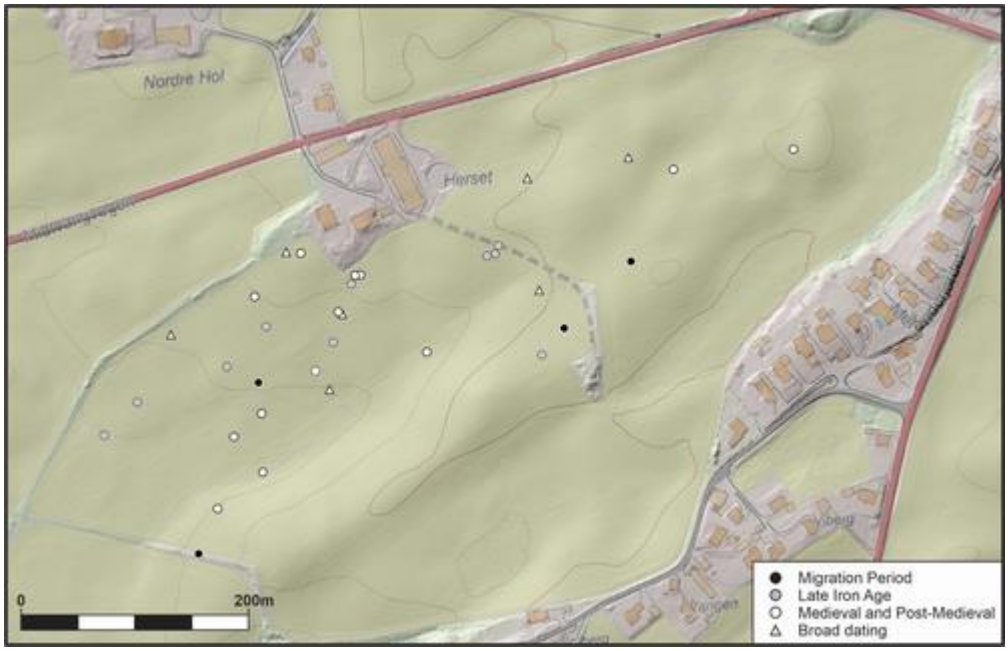

Figure 6: Distribution map of the detector finds on Herset farm, Hamar municipality (seen in Figure 5). The detectorist searching the farm works in a mostly unsystematic fashion, and rarely digs iron signals. The low-lying areas to the south and east are damp, and the detectorist has not searched here. The finds are widely distributed in the fields with no clear chronological concentrations, the exception being three Viking Age finds near the farm road, but they are parts of the same trefoil brooch. Image credit: Lars Pilø

There have been two large-scale investigations of the origin of metal-detected finds from the plough zone in Innlandet, both combining ground-penetrating radar with evaluation trenches. At the previously mentioned Storhov location, a settlement site with an adjoining iron extraction area were uncovered where the smithing hoard had been found. The field surrounding this site had many finds of Henriksen's category 1 and 5, and no connections to underlying structures were found (Sand-Eriksen *et al*. 2020). At Gile in Østre Toten Municipality no clear link could be found between the plough-zone finds and underlying archaeological sites (Grøtberg and Sandodden in prep).
Innlandet has conducted evaluation trenching in five find areas where the character of the finds indicates that they originate from contexts belonging to Henriksen's category 3, especially graves. These surveys have either revealed cooking pits likely unrelated to the

finds, or no preserved remains at all. This implies that the graves are completely destroyed, with nothing left to legally protect (except the cooking pits).

It is uncertain if the finds were originally lost or deposited near where they were later found by a detectorist. It is well known that artefacts are displaced owing to ploughing and harrowing fields, sometimes by 50m or more (see references in Henriksen 2016 and Pilø 2007). The situation is similar in Innlandet, where refitting parts of the same objects or parts of the same find show a wide distribution, separated by up to 80-100m (Figure 7).

Figure 7: Refitting parts of a damaged buckle from around 600 CE (locations shown with red circles), found with a wide distribution in a field. Image credit: Lars Pilø

Labelling a find spot or finds area in the plough zone as automatically protected without an archaeological investigation, seems like guesswork in most of the Innlandet cases. The Innlandet policy is to label find spots as automatically protected only when detected finds indicate the presence of a protected site on a find spot, and where evaluation trenches provide evidence that such sites are preserved beneath the plough zone.
On the other hand, continued detector survey on a find-producing area with Henriksen's category 1 and 5 finds, which gradually produces increasingly bruised and battered artefacts, does not really add much archaeological knowledge to the record. Once the character of a field with finds is understood, then the heritage unit recommends that detectorists search for artefacts elsewhere. Of course, fields may have more than one archaeological signature, complicating matters.

4. Discussion

Metal detecting poses challenges to the preservation of the archaeological record, both in Norway and internationally. How does the Innlandet approach address such issues? Nighthawking and looting of sites and finds not reported pose the largest threat. Innlandet also has this problem, but it is difficult to assess the extent of it. Responsible detectorists report that there are other detectorists who do not report their finds. Some of these detectorists may be newcomers who have not yet found artefacts, but there is information suggesting some other detectorists hunt for coins to sell on the black market. The heritage unit passes such information to the police, but it is difficult to press charges based on hearsay. Innlandet has few reported incidents of illegal digging on protected sites. The law-abiding detectorists also try to help newcomers who start off without reading the law and guidelines.

The Innlandet heritage unit uses both media and law-abiding detectorists to convey to landowners that they should only admit detectorists with a certificate from the Innlandet heritage unit. Otherwise, they run the risk that valuable coins are found, but not reported,

and sold on the black market. The landowners are entitled to half of the finder's fee, which they will lose if a detectorist commits embezzlement and does not report the find. In the case of Norwegian medieval silver coins, the market value and the finder's fee are up to 2000 Euros.

Both nighthawks and responsible detectorists may damage preserved archaeological contexts while digging following signals. The heritage unit in Innlandet has addressed this type of damage during the annual detector meetings with good results. After 2017, when the meetings started, there are no recorded cases of digging into preserved contexts below the plough zone among detectorists participating in these meetings. Instead, detectorists stop digging and report deep signals to the heritage unit. About fifteen such deep signals have been examined by archaeologists in recent years. All these signals except one have turned out to be modern objects, the exception being a Late Iron Age lancehead.

In Innlandet, inadequate documentation of the find spot and improper handling of artefacts is limited to novice detectorists and nighthawks. Novice detectorists may have collected artefacts unknowingly because they have little or no knowledge of what artefacts look like. The Innlandet archaeologists always ask new detectorists to bring along their scrap metals to their first visit. Often, artefacts are recovered from the scrap metal bag, but the find location is then lost (see also Gundersen 2019, 134). Another problem is that new detectorists sometimes clean the objects for trophy photos, potentially damaging the gilding on objects, for instance. Correct procedures are explained to new detectorists during their first visit to the heritage unit, or online when they display their finds on social media. Overcleaning finds can lead to no finder's fee being paid out. Many of the mistakes committed by new detectorists in Innlandet are commonly seen elsewhere in Norway. Such mistakes could likely be minimised by implementing a national mandatory course in responsible use of metal detectors, before being allowed out to the fields.

There are other challenges. Currently, Innlandet county receives around 1000 finds per year, and resources are limited. The spotlight that the heritage unit gives the detector finds has probably led to an increase in the number of detectorists in Innlandet, leading to more finds and creating more pressure on the management resources. Some counties do not receive nearly as many finds. For example, in the NTNU University Museum database, 1143 finds from Trøndelag county, 199 finds from Møre and Romsdal county, and 22 finds from Nordland County were recorded between 2013-2022 (Fredriksen 2023, 18). The Museum of Cultural History has a large backlog of detector finds, which stretches the museum resources. However, the alternative is that the artefacts are destroyed in the plough zone and are lost without record. The plough zone is not a suitable storage space for fragile artefacts (Haldenby and Richards 2010).
Innlandet is also facing a bit of a conundrum regarding the identification of detector finds belonging to ploughed-damaged settlement sites (which would be automatically protected). Such settlement sites can be clearly visible in metal-detected assemblages elsewhere, such as at Nørholm in Jutland (Christiansen 2020). There are few, if any, such large and clear find assemblages in Innlandet. Why not? Are artefacts scarcer on settlement sites in Innlandet than in Jutland, or will they eventually appear as archaeologists put in enough evaluation trenches?

At the moment, finds are being rescued from the plough zone, but limited research is conducted on these objects. This is a marked contrast to, for instance, Denmark and the United Kingdom. A possible explanation is that large-scale detectorism is still a relatively new phenomenon in Innlandet and Norway. It may, however, also be caused by a lack of emphasis on the study of objects during the teaching of archaeology at Norwegian universities. It is quite common that serious detectorists have a greater knowledge of metal artefacts than the archaeologists handling the finds. We should embrace the artefact

knowledge of the detectorists and be inspired by it to utilise the scientific potential of the finds.

Some researchers have suggested that the earlier emphasis on a distinctive Norwegian building development in archaeological research may have delayed the introduction of mechanical topsoil removal in field archaeology. This popular school of thought emphasised objects, graves, and written sources over building remains and structures (Gjerpe 2014; Pilø 2005). Today, mechanical topsoil removal is the most common method of excavation in agricultural areas. Norwegian excavations are commonly focused on archaeological structures (such as postholes, fireplaces and cooking pits) over objects. When introducing the method, it was important to refute the earlier premise that all features were equally important (Løken *et al*. 1996, 21). As a consequence of the increasing use of mechanical topsoil removal, archaeological objects in the plough zone were neglected. As plough-zone finds could not be related to archaeological structures, they were considered less valuable than objects originating from a secure context. Our impression is that this perception of plough-zone finds has recently been changing, as metal detecting is often used as a supplementary method in archaeological excavations today, including in Innlandet.

Jostein Gundersen has criticised hobby metal detecting for being 'an extremely object-focused branch of archaeology' (Gundersen 2019, 129-30). Stressing the sometimes treasure-hunting character of metal detecting, Gundersen argues that for metal detecting to become a valuable contribution to professional archaeology, the focus must shift 'from perceiving objects as trophies to valuing their original context' (Gundersen 2019, 130). While we recognise that Gundersen has a point, it is hard to perceive the broken and uncleaned brooches the heritage unit receives as trophies. The detectorists are justifiably proud of their finds. The value of the finds lies not so much in their bling factor as in the information these small, unassuming finds can yield about settlements and landscape history.

After less than a decade of extensive reporting of metal detecting finds in Innlandet, a new picture of the prehistoric and medieval periods of the county emerges (Figure 8). It has become possible to conduct studies of both individual farms and landscapes, based on broader empirical evidence than just graves and place names, the traditional pillars of Norwegian settlement history. This is also true for other counties, such as Trøndelag (e.g. Maixner 2020). The history of coinage use has expanded dramatically, adding a large number of accidental losses of individual coins from the Roman period to the 17th century to the pre-existing hoard finds. The limited number of imported artefacts from the Viking Age are now supplemented by dozens of Insular metal objects found by local detectorists (see e.g. Pettersen 2022, 169). The number of Bronze Age artefacts has also increased. Now, more than 100 detectorists collect finds in Innlandet, functioning as ambassadors for our shared cultural heritage to local farmers.

Figure 8: A collage of some of the most important detector finds from Innlandet County, found 2011-2022. Not to scale. From the top left corner: Flanged axe, Early Bronze Age (finder (F): Steen Agersø, photo (P): Freddy Arntsen); La Tène fibula, 1.-2. century BCE (F&P: Roger Mickelson); Gold berlock, 1.-2. century CE (F&P: Vegard Høystad Lunna) ;Roman denarius (Marcus Aurelius, 2nd century CE) (F&P: Frank Robert Ludvigsen) ; Gold fingerring, 3.-4. century CE, with a medieval inscription (F&P: Rune Thyregod Paulsen); Gold Bracteate, Migration Period (350-550 CE) (F&P: Terje Marken); Agraf button, Migration Period (F&P: Ola Andreas Vestby Sandlie); Domed brooch, Merovingian Period (AD 550-800) (F&P: Kenny Hansen); Frankian denarius (Charles the Bald), 9th century CE (F&P: Terje Staale Sande); Insular metalwork, VIking Age (F&P: Kenny Hansen); Patrice for a Hiddensee-type brooch, Viking Age (F&P: Hugo Falck); Rare type of domed brooch, Viking Age (F: Britt Annie Hoddø, P: Kenny Hansen); Dirhem, Viking Age (F&P: Tor Arne Tjernslien); Cross-/hammer-shaped pendant, Late Viking Ae/Early Medieval Period (F: Ole Harpøth, F: Kenny Hansen; Elaborate Urnes brooch, 11th-12th century (F&P: Kristian Thoresen); Limoges figurine, medieval (F&P: Vegard Høystad Lunna); Seal from a cloister in Denmark, medieval. (F&P: Kenny Hansen); Ring brooch in gold, medieval (F&P: Kenny Hansen)

Gundersen suggests that sites in the plough zone can benefit from being recognised and labelled as automatically protected (Gundersen 2019, 134). He is concerned with uncontrolled metal detecting on potential sites, while listing possible negative effects of not recognising such sites: 1) dishonest detectorists, 2) detectorists digging deeper than the plough zone, causing damage to protected sites, 3) that the cultural heritage managers have no means to demand the use of GPS or maps if a site is not protected, and 4) that inexperienced detectorists fail to recognise archaeological objects, thereby accidently removing them from protected sites (Gundersen 2019, 134). These are important issues. Marking a large area as a protected site to regulate how metal detecting is conducted is certainly an appropriate heritage management practice under the right circumstances —

such as market sites of the type common along the Oslofjord area, and which may draw detectorists, experienced and inexperienced alike, from near and far. However, this regulatory approach does not apply equally well in Innlandet. There are few protected sites based on metal detecting alone in Innlandet, and no market sites (yet). The local detectorists in Innlandet mainly find artefacts of Henriksen's (2016) category 1 and 5. They are experienced detectorists who know the artefact types, who use GPS, who do not dig underneath the plough zone, and have an agreement with the landowner who gives them exclusive rights to search on the farm. These responsible detectorists do not constitute a threat to the artefacts; the continued exposure to bruising and damage in the plough zone does.

The Innlandet heritage unit solves most issues related to possible automatically protected sites through a dialogue with the detectorist in each case. If suspicion arises that detector-finds might indicate the presence of an automatically protected site, the detectorist is told to stop searching there, until archaeologists have evaluated the evidence. The normal procedure then is to put evaluation trenches over the find spot and/or to conduct a systematic metal detector search around the findspot with archaeologists present. Using an approach as described by Gundersen would entail that the detectorists would need to apply for permission to continue searching. The heritage unit would need to handle the permission from the detectorist, and the museum would need to give their input to the application. Such permission applications from detectorists in Innlandet, and there have been a few, just create time-consuming red tape and do little to facilitate the discovery and documentation of the artefacts in the ploughed fields. It also takes away time from other pressing non-detecting matters in heritage management. The Innlandet heritage unit discourages such applications for permissions to detect on protected fields. There are many other non-protected fields where searches can be conducted.

We believe collaborative hobby metal detecting is the best way to collect and document artefacts in the plough zone. In our opinion, general *in situ* protection in the plough zone is the 'worst practice' when considering the purpose of the CHA § 1:
It is a national responsibility to safeguard these resources as scientific source material and as an enduring basis for the experience of present and future generations(…). (The Act Concerning the Cultural Heritage 1978, §1).

The concept of automatic protection has expanded since the law entered into force, and the regulations concerning this concept were originally intended for fixed sites and monuments (Fredriksen 2021, 144). The questions concerning farming in the 'ground above' a protected site (the plough zone) has only recently become the subject of discussion, resulting from a decade of increasing hobby metal detecting. There is a new law on the way. In the White Paper from 2020, the Norwegian government announces its work on a new Cultural Environment Act, replacing the current CHA. We hope the new law makes a sustainable statement regarding both the issues of the 'ground above', as well as people's rights to engage in heritage.

5. Final remarks

We perceive hobby metal detecting within the Norwegian context as an essentially good thing, as important artefacts are being destroyed in the plough zone. The presence of a large group of local people with an interest in history and a commitment to help salvage these finds, is really a great gift to the archaeology of both Innlandet and the rest of Norway. This does not mean that there are not downsides to metal detecting. As we have seen, there are examples of criminal metal detecting in Innlandet, mainly coin hunters. However, these incidents do not overshadow the substantial upside of hobby metal detecting (see Gundersen *et al*. 2016 for examples of criminal metal detecting in Norway).

The 2020 White Paper states that the local population must be given the opportunity to engage with their past. When heritage management is interacting with and helping local detectorists to search for artefacts, this is exactly what is achieved. The goal in Innlandet has been to increase the archaeological competence of the local hobby detectorists through dialogue, while at the same time recognising the skills and knowledge of the detectorists, especially their often substantial knowledge of artefact types and dates.

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