

Collaboration and Communication between Hobby Metal Detectorists and Archaeologists in Norway

Irmelin Axelsen 

ABSTRACT

In this article, the ways in which hobby metal detectorists searching for protected objects in the ploughsoil and archaeologists in Norway have collaborated and communicated throughout the public history of metal detecting in the country is outlined and problematized. Due to the opinions of individual archaeologists working in key positions and the autonomy of the country's local and regional management institutions, there are huge variations in both attitudes and practices toward metal detecting and its practitioners. In some areas, metal detectorists are allowed to search more or less freely, whereas in others, entire fields are protected after a few finds, making continued detecting without formal approval from the authorities illegal. Because of this, and the extreme difference in the activity level of individual detectorists, the number of recorded detecting finds varies immensely across county and regional borders. I suggest that channels for collaboration and communication be formalized and that a national and therefore uniform public reporting system be realized—given that it is, for the time being, largely up to individual archaeologists whether some of the country's most active citizen scientists are equally treated by the archaeological heritage management system in Norway.

Keywords: archaeological heritage management, citizen science, hobby metal detecting, public finds recording schemes, FAIR data

Este artículo explora y problematiza las formas de colaboración y las estrategias de comunicación que tanto arqueólogos como usuarios de detectores de metales aficionados buscando objetos protegidos han ido siguiendo en Noruega. Actualmente existe un amplísimo espectro de actitudes y consideraciones hacia el uso de detectores de metales y sus usuarios, en base a las opiniones particulares de arqueólogos instalados en altos cargos administrativos y al grado de autonomía legislativa existente entre instituciones locales y regionales. En ciertas regiones, a los usuarios de detectores de metales se les permite realizar búsquedas libremente, mientras que en otras zonas se protegen parcelas completas una vez que se realiza un descubrimiento en ellas, lo cual se traduce en que cualquier continuación de la práctica de detección de metales sin la autorización correspondiente sea considerada ilegal. Debido a esta situación, además de la variabilidad extrema en los niveles de actividad de los distintos usuarios de detectores de metales, el número de hallazgos es sumamente dispar a nivel tanto municipal como regional. Propongo la formalización de canales colaborativos y comunicativos y la integración a nivel nacional de los mecanismos de reporte de hallazgos a través de un sistema de información público y homogéneo, ya que en este momento la responsabilidad de que algunos de los científicos-ciudadanos más activos del país sean tratados equitativamente por parte del sistema noruego de gestión del patrimonio depende, en gran medida, de las decisiones de arqueólogos individuales.

Palabras clave: gestión del patrimonio arqueológico, ciencia ciudadana, afición a la detección de metales, programas de documentación de hallazgos públicos, principios FAIR

Since 2014, the most prolific contributors of metal objects to Norwegian archaeological collections has been hobby metal detectorists who actively search for protected heritage objects. Although the lines are sometimes blurred, with archaeologists taking up metal detecting as a hobby and metal detectorists becoming archaeologists, the group is predominantly made up of nonheritage practitioners. In Norway, hobby metal detectorists are usually referred to as "private metal detectorists" so as to make a distinction between the professional and nonprofessional use of

metal detectors (e.g., Dahle et al. 2019; Gundersen 2019; Gundersen et al. 2016; Maixner 2015; Rasmussen 2014). In other parts of the world, the terms "hobbyists," "avocational archaeologists," "hobby archaeologists," or "amateur archaeologists" are used instead (Addyman and Brodie 2002:180; Connor and Scott 1998:80–81; Dobat et al. 2019:1; Pitblado 2014:340). Although metal detector users constitute a large and varied group, the ones that are discussed in this article have used their detectors to search for objects that are protected by Norwegian legislation.

Advances in Archaeological Practice 10(3), 2022, pp. 295–310

Copyright © The Author(s), 2022. Published by Cambridge University Press on behalf of Society for American Archaeology. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike licence (<https://creativecommons.org/licenses/by-nc-sa/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the same Creative Commons licence is included and the original work is properly cited. The written permission of Cambridge University Press must be obtained for commercial re-use.

DOI:10.1017/aap.2022.14

Detectorists have either been lauded in national print media as something akin to “heritage rescue workers” or lamented as a possible threat to the nation’s cultural heritage. The country’s national cultural heritage act went into force in 1979 and has undergone only minor changes since. Hobby metal detecting is therefore not directly regulated by any law in Norway, and a detectorist only needs the landowner’s permission to detect in an area. Still, several sections of the Act Concerning the Cultural Heritage (Norwegian Cultural Heritage Act [NCHA]) of 1978, for example, affect how and where the hobby can be legally conducted, and I briefly expand on this below. One consequence of the lack of a national policy concerning metal detecting is that the attitudes and practical responses to the detectorists’ active search for protected archaeological objects, primarily on farmed land, has varied immensely across the country. For many years, it was up to individual archaeologists in key positions in counties or at archaeological museums to decide how to deal with detectorists. Because of this, and the lack of policy, the Directorate for Cultural Heritage finalized the national “Guidelines for the Private Use of Metal Detectors” (Directorate for Cultural Heritage 2017a) in 2017, and “Guidelines for Stipulating a Finder’s Fee” in 2019 (Directorate for Cultural Heritage 2019a).

In this article, I outline and problematize the public history of hobby metal detecting in Norway, and the regional and national responses from the archaeological heritage management to the activity. A special emphasis is put on considering how the country’s governance ultimately affects the research potential of the finds. With this as a backdrop, I discuss some of the consequences of the varied attitudes and practices among the country’s archaeologists toward hobby metal detecting. Finally, I make some research-based recommendations for policy changes that have the potential to further improve our cooperation with and inclusion of some of the country’s citizen scientists in our management practices. The material primarily stems from interviews with nine metal detectorists and 10 archaeologists in Norway, conducted between 2018 and 2019, digitized newspapers, and the digital records of the reported and recorded hobby detecting finds. The material was collected as part of my doctoral project, which took an exploratory approach to the practices and attitudes toward (certain) old things among archaeologists and hobby metal detectorists, as well as toward themselves and each other, in Norway (see Axelsen [2021] for more thorough descriptions of the data collection and underlying methodologies).

MANAGEMENT AND LEGISLATIVE BACKGROUND

In Norway, all *løse kulturminner*¹ (“protected objects”)—a category that includes human remains when they are found outside of an archaeological context—if discovered, are the property of the state, and no one is allowed to damage them (NCHA 1978, §§ 12–13; see also Fjell and Holme 2020:123–125). Private finders are required to report the discovery of such objects as soon as possible and then hand them in to the responsible authorities. This usually means the county municipality where the artifact was discovered, but detecting finds can also be reported and handed in to the Norwegian Sámi parliament, one of the country’s five regional archaeological museums, or the police. For a protected object discovered after June 29, 2017, to also be eligible for a

Table 1. Size and Percentage Distribution of Land Area and Cultivated Land in the Five Different Archaeological Museum Regions.

Museum	Land Area (km ²)	%	Cultivated Land (km ²)	%
Museum of Cultural History	103,497	34	4,507.0	4.4
Arctic University Museum of Norway	90,800	30	498.3	0.5
NTNU University Museum	64,011	21	1,959.2	3.1
University Museum of Bergen	37,209	12	557.6	1.5
Museum of Archaeology	8,575	3	529.2	6.2

Note: Data and percentage distribution of land area and area of cultivated land have been collected from and calculated based on data from Statistics Norway’s open-access tables “06462: Agricultural area for selected crops (decares) (M) 1969–2020” and “11506: Agricultural area, by use (decares) (C) 1969–2021.” Only “fulldyrka mark” (“arable land”) in the category “cultivated land” is included. Surface-cultivated and infield pastures are therefore excluded.

so-called finder’s fee, contextual information—such as the coordinates—about the find has to be reported along with the artifact, and I expand on this below. The NCHA defines protected objects as Sámi objects older than 1917, coins older than AD 1650, and all other objects older than AD 1537.

The country is divided into five archaeological regions, which vary greatly in both land area and population size (Table 1; Figure 1). There is one archaeological museum in each of them, which are responsible for (among other things) collecting, storing, and conserving all protected objects discovered on land, both by private finders and during archaeological surveys and excavations (Figure 2). All five physical collections and archives are accompanied by a digital database, the *gjenstandsbaser* (“artifact databases”) of *Universitatemuseenes samlingsdatabaser* (“University Museums’ Collection Databases”). The spatial, textual, and visual data on the finds, given by the metal detectorists or other finders, are recorded directly in databases and stored there, and they have functioned as the museum’s catalogues and digital find repositories since 2004 (Jordal et al. 2012:256; Matsumoto and Uleberg 2015:162). Objects discovered by nonprofessionals are recorded in the same manner as those uncovered during archaeological projects, and the same data fields are to be filled in. The databases are not accessible to the public, but when an artifact is fully recorded, most of the stored information is published online at *Unimusportalen*, which is available to everyone. The portal currently holds information about more than 1.5 million objects, most of which are also georeferenced (Matsumoto and Uleberg 2021:Section 4).

Although metal detecting is not directly regulated by any Norwegian law, as archaeologist Jostein Gundersen (2019) has pointed out, five sections² of the NCHA still have effect on the legality of hobby metal detecting. They have also affected how the artifacts they discover and the detectorists themselves have been and are treated by the archaeological heritage management in Norway. It should be stressed that the differing treatment of the

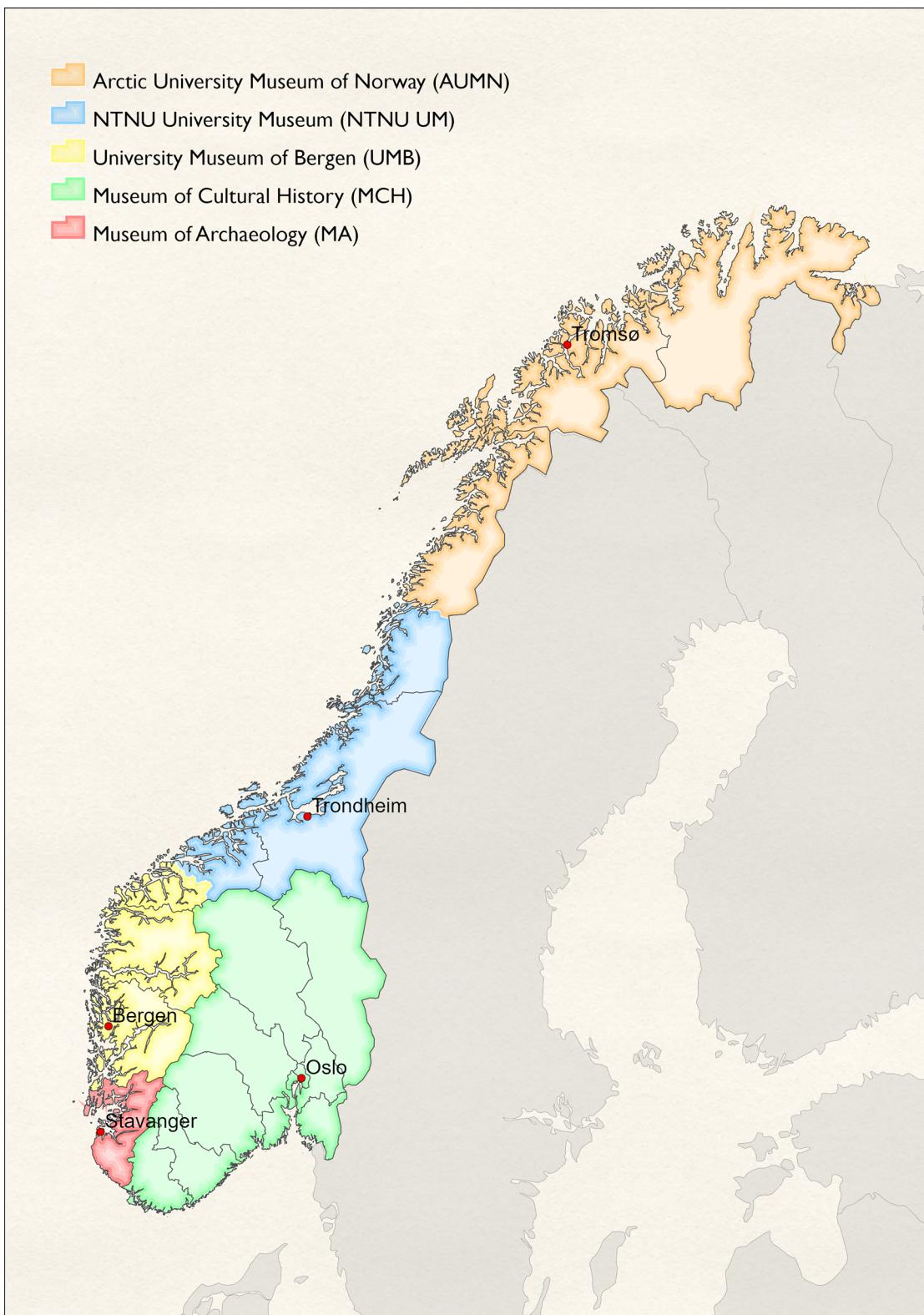


Figure 1. Regions of the five archaeological museums. Red dots show the location of the museums, and the legend is sorted from north to south. The county borders are from before 2020, when there were 18 counties. A disputed and large regional reform that went into effect on January 1, 2020, led to there being 11 counties. After a change of government in 2021, referendums were held in many of the new counties, and several of them will return to their former geographical and administrative borders. (Map by Jan Kristian Hellan.)

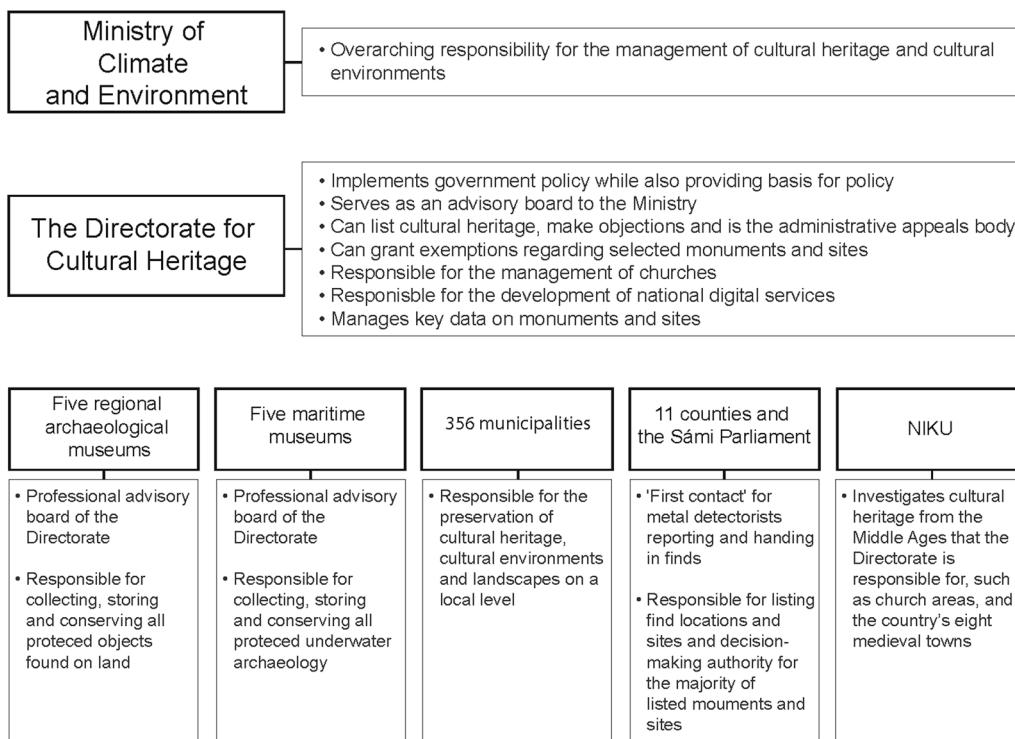


Figure 2. The structure of Norwegian heritage management and division of legal responsibility after the NCHA (Directorate for Cultural Heritage 2019b, 2020; Gundersen et al. 2016).

objects does not relate to the general cataloging of the hobby finds done by the archaeological museums. Rather, it is visible through a lack of standardization of the ontology for some of the metadata for the detecting finds, such as recording that they have indeed been found by hobbyists. Additionally, it is reflected in how the findspot(s) are classified by the counties in Askeladden, the Directorate's official database for, among other things, all protected cultural heritage. Information from Askeladden is available to the public through the website Kulturminnesøk, where registered users can record and update information about finds and sites. Data from Askeladden is also accessible as a WMS and a dataset through Geonorge.

The classification of findspots is connected to Section 3 of the NCHA and the "automatic protection" afforded to archaeological sites and monuments. It means that "any site or monument of a certain age"—a *kulturminne* in Norwegian—is equally protected, regardless of its location, visibility, and any official knowledge of its existence (Gundersen 2019:125). If it exists, it is protected. Because of this, metal detectorists are also generally advised to not detect in mountain or forest areas, because they are more likely to disturb an archaeological site or monument (Directorate for Cultural Heritage 2017a:3). Varying opinions about what the finds constituted has resulted in different practices in the country's counties when it comes to when and how a potential site is recorded and listed (Gundersen 2019:131; for discussions of possible connections between objects found in the ploughsoil and underlying features or sites, see also Sand-Eriksen et al. 2020; Tonning et al. 2017).

Given that no one is allowed to conduct any undertakings that may damage or disturb monuments or sites of a certain age, some

counties chose to define the findspot of a protected object as "automatically protected" and therefore as a (potential) site (Axelsen 2021:74; Directorate for Cultural Heritage 2016:24). Continued metal detecting on these areas is illegal, unless one applies to the responsible county for an exemption according to Section 8 of the NCHA. In order to protect any potential site underneath it, a few counties also recommended a "security zone" of more than the 5 m that Section 6 of the NCHA offers a site or monument from its "visible perimeter" as an automatic delimitation until the area has been specifically delimited, whereas others did not (Axelsen 2021:72–73; Directorate for Cultural Heritage 2016:77, 80). Following the ratification of the Valetta Convention, in 1995, in situ preservation of objects, sites, and monuments, if possible, is preferred (Valetta Convention 1992). Archaeological excavations in Norway are therefore almost exclusively "rescue" driven and a consequence of various development projects. As a result, the discovery of metal-detecting finds on farmed land seldom leads to any additional investigations, unless an archaeological context—for example, a grave or hoard—has been disturbed and must be secured to hinder further rapid degradation of any remaining features or objects.

Finder's Fees and Ownership

Practices surrounding who has the right to own heritage objects and the practice of awarding a finder's fee—a monetary reward for certain protected objects—has a long history in Norway, and this has been regulated since at least AD 1687 (Fjell and Holme 2020:122; for a brief history and contextualization of the finder's fee arrangement, see also Rasmussen 2015). Today's arrangement has been practiced since 1905 (Directorate for Cultural Heritage

2019a:1). Found objects—that is, objects without a known owner, as described in the NCHA—are the property of the state. The regional archaeological museums are tasked with collecting, storing, and conserving these objects on behalf of the state (Figure 2).

According to Section 13, the Directorate may decide on a reward that is to be shared equally between the finder and the landowner. The fee is meant as an incentive for finders to adhere to their legal obligation to report a protected object (Rasmussen 2015:10). The Directorate stresses in its “Guidelines for Stipulating a Finder’s Fee” that the reward is “an acknowledgement and a recognition to the finder and landowner, not a governmental purchase of objects” (Directorate for Cultural Heritage 2019a:1; author’s translation). The size of the reward is discretionary, although it has been nationally regulated since 2019. However, if the object is made of gold or silver, the reward must be set to at least the value of the metal, based on its weight, plus an extra 10% (but the law allows for the reward to be lower under “special circumstances”).

Because the finder’s fee has deep historical roots in Norway, the practice predates hobby metal detecting. When detecting became more popular, it led to debates about whether the hobbyists should in fact be financially rewarded for their interest in and active search for protected objects (Rasmussen 2015:10). The likely original intent of the law was to encourage incidental finders to report and hand in archaeological artifacts instead of, for example, selling them (Rasmussen 2015:9). Sindre Fjell and Jørn Holme (2020:138), in the Directorate’s official comment on the NCHA, write that the deliberate search for protected objects requires a higher level of prerequisite knowledge. They add that the size of the finder’s fee can be reduced, or be eliminated entirely if, for example, a metal detectorist has not followed the “Guidelines for the Private Use of Metal Detectors” (Fjell and Holme 2020:138).

As Gundersen (2019:120) points out, many metal detectorists spend a lot of time on determining which fields are likely to be “productive”—that is, resulting in the discovery of protected objects precisely because there was, and still may be, an archaeological site underneath the plough layer. This makes detectorists’ discovery of archaeological objects far from accidental (Axelsen 2021:142). I return to this in a section briefly describing the national guidelines concerning metal detecting, after first detailing parts of the public history of detecting in Norway.

HOBBY METAL DETECTING IN NORWAY

The use of metal detectors to search for archaeological objects has existed as a pastime in Norway since at least the late 1970s (Axelsen 2021:80). In 2014, the visible detecting activity, illustrated by the number of reported finds, more than doubled from the previous year—from approximately 440 to roughly 1,030 (Figure 3; Axelsen 2021:193–194). From 2016 onward, the yearly number of reported finds seem to have, for now, stabilized at around 2,500–3,000, with more than 70% of those objects being discovered within the Museum of Cultural History’s management area (Table 2; Figure 3; Axelsen and Fredriksen 2022). The number of recorded hobbyists and the number of reported finds are relatively small compared to, for example, Denmark (Dobat et al. 2019:

Table 1), and in March 2022, only 1,063 individual finders were listed in the country’s artifact databases (Axelsen and Fredriksen 2022). In the following sections, I briefly sketch out some of the public history of metal detecting in Norway. The sources were found in the National Library of Norway’s digital archives. They describe their physical collection of newspapers as “as good as complete from 1763 and until today” (National Library of Norway 2022). The digitization of the collection is, however, an ongoing project and contains some “voids” (National Library of Norway 2022).

For those unfamiliar with metal detecting as a recreational activity, this outline may seem like a local and country-specific case, and in some ways, it is. Legislation pertaining to metal detecting does, after all, vary greatly across Europe and other parts of the world (e.g., Bland 2005; Deckers 2019; Dobat et al. 2020:272; Gundersen 2019; Makowska et al. 2016). Still, the attitudes, the debates, many of the issues, and the ways archaeologists and heritage institutions respond and adjust to the hobby and its practitioners over time is surprisingly similar in many countries (e.g., Dobat 2013; Immonen and Kinnunen 2016; Thomas 2012).

Before 2014

Although metal detectors were available to the public from the 1950s, it took some time before people in Norway used them to actively search for and uncover protected objects. During the early 1970s, ads promoting the detectors’ ability to aid in the search for hidden “treasures” was common. So were reports of the hobby causing concern among archaeologists in the UK about the possible damage the activity could have on archaeological objects and sites (Axelsen 2021:80). In 1978, the first interview with an enthusiastic detectorist was published in a Norwegian newspaper. The journalist suggested that if one was still looking for ideas for this year’s Christmas presents, an “electronic treasure searcher” could bring joy to the entire family (Olsen 1978; author’s translation).

During the 1980s, interviews with detectorists and articles about metal detecting became more common (Figure 4). In 1981, local newspaper *Halden Arbeiderblad* reported that “amateur archaeologists” were treasure hunting at Fredriksten (*Halden Arbeiderblad* 1981a; author’s translation), a fortress constructed during the seventeenth century. The newspaper followed up only three days later with an article with comments by an “outraged” Directorate for Cultural Heritage (*Halden Arbeiderblad* 1981b). The Directorate commented that the treasure hunting could “destroy all future archaeological investigations” (*Halden Arbeiderblad* 1981b; author’s translation) on the site. Other articles did not focus on the potentially negative aspects of metal detecting nor on the attitudes of Norway’s archaeological heritage management toward the hobby. National newspaper *Aftenposten*, for example, published an interview with the managers of a “hobby center,” where detecting was described as the new *hobbydille* (“hobby craze”), adding that “stories of people financing both houses and cars with the finds did nothing to diminish the interest” (Hegge 1982:8; author’s translation).

Such articles and ads promoting the sale of metal detectors were fairly common throughout the 1980s. Advertising and selling metal detectors has never been illegal, but some of the early marketing used sales point that were in so-called juridical gray

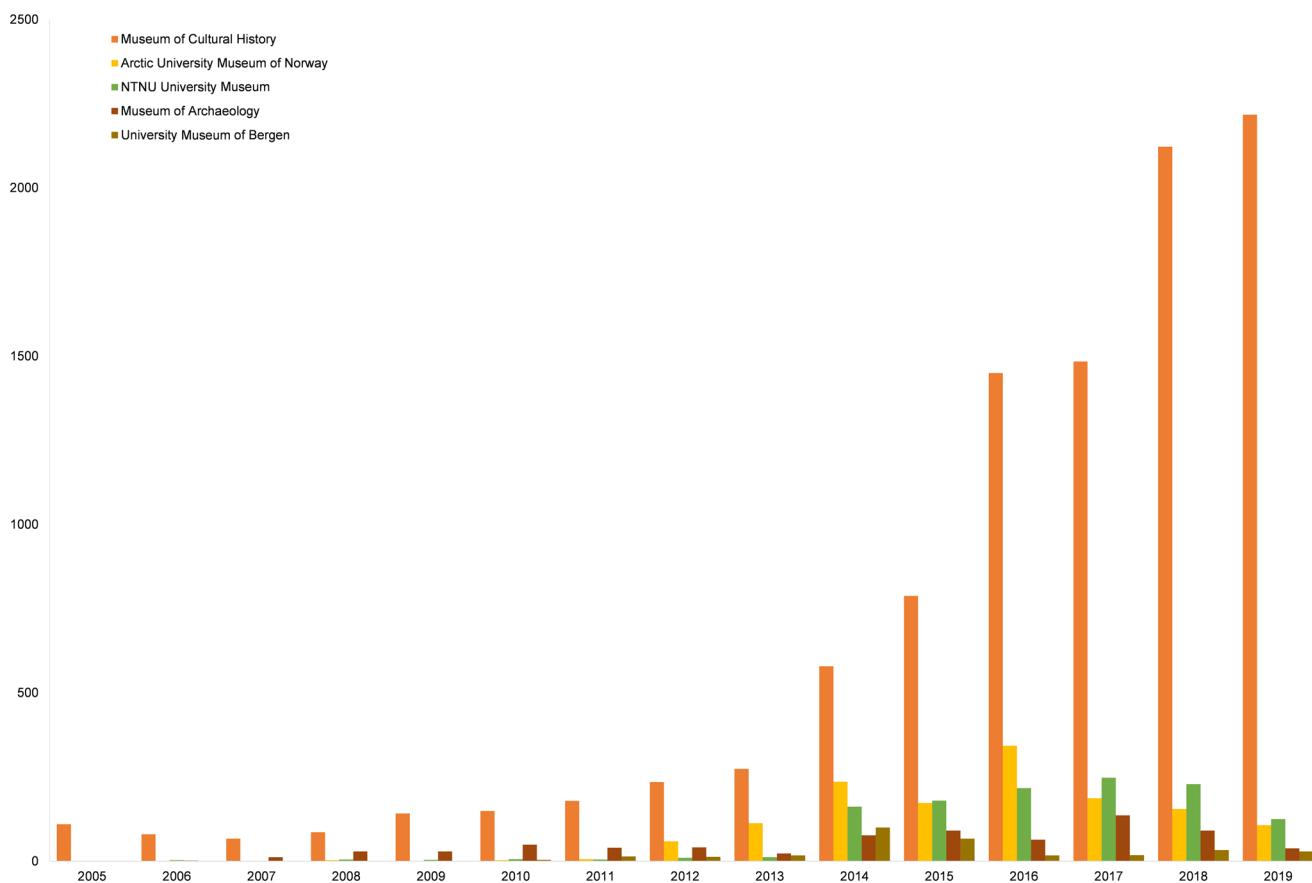


Figure 3. The yearly amount of reported and recorded hobby detecting finds between 2005 and 2019 at the regional archaeological museums.

areas. The Directorate for Cultural Heritage evidently decided to seek out those professional actors that promoted the detector as the ideal tool to find valuable treasures, such as old axes and coins: "A few companies in Oslo have been busted for illegal marketing of metal detectors. These companies have changed their marketing after rebuke from us, so that they no longer encourage actions that violate the Cultural Heritage Act" (Oppland Arbeiderblad 1990; author's translation). Archaeologist Lyder Marstrander also added that the potential for the detector to be a profitable treasure-hunting tool was "very exaggerated"; the

things one recovered would not be saleable because no coin dealers would accept medieval coins (Oppland Arbeiderblad 1990; author's translation). Shortly after, the publishing of such ads stopped (Figure 4). The drop in the publishing of ads promoting the sale of detectors coincided with a general "lull" in other texts about hobby metal detecting (Figure 5).

In 1997, metal detectors were described as a threat (Børringbo 1997). Reportedly, the Directorate for Cultural Heritage had started a cooperation with Økokrim (National Authority for Investigation and Prosecution of Economic and Environmental Crime) to estimate how many people were metal detecting, in what areas, and which heritage sites, monuments, and objects were most threatened by the activity (Opland 1997). A coin dealer in Tønsberg had turned down the offer to buy coins that were older than AD 1650, found in a different region than where he was located, and the Directorate asked people to contact the agency if they saw anyone metal detecting in the area around Tønsberg (Børringbo 1997). Earlier that spring, the Directorate had sent a letter to "all involved parties," such as local historical societies, Norges metallsøkerforening (Norway's Metal Detecting Society), and numismatic societies, informing them that archaeological objects found by metal detectorists were being sold illegally (Børringbo 1997; author's translation). The letter was described as "unfair and tendentious" by a private metal detectorist, questioning whether the Directorate wanted to make a legal hobby

Table 2. The Number of Reported and Recorded Detecting Finds per Museum on August 12, 2019.

Museum	Number of Reported Detecting Finds	%
Museum of Cultural History	7,295	70.7
Arctic University Museum of Norway	1,247	12.1
NTNU University Museum	918	8.9
Museum of Archaeology	675	6.5
University Museum of Bergen	186	1.8
Total	10,321	

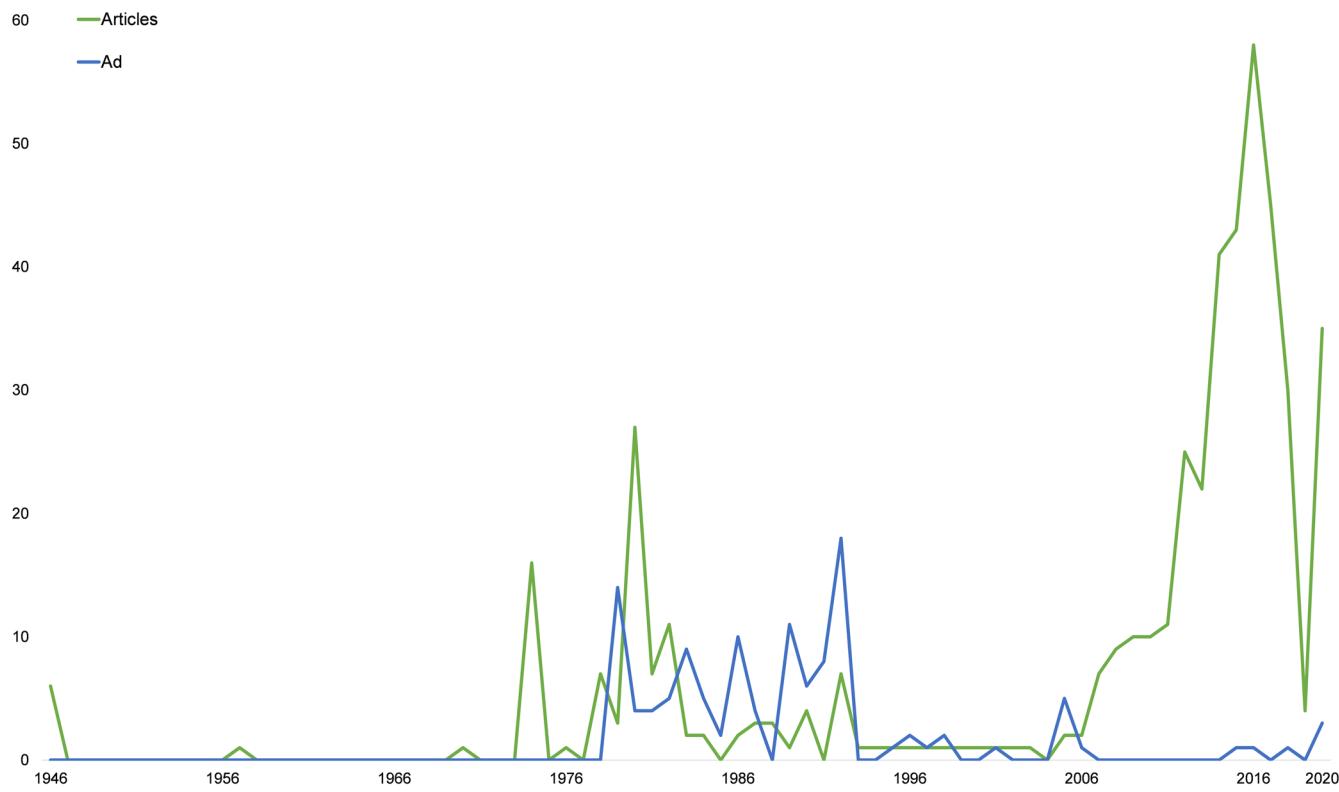


Figure 4. Development of published ads versus other types of work in newspapers. The searches in the Norwegian National Library's digital archives were done on January 1, 2021.

illegal (Lie 1997:4; author's translation). Sjur Harby, who worked for the Directorate for Cultural Heritage, refused to answer what the aim of the investigation was until the Directorate and Økokrim had received answers to their inquiry, but he was quoted as saying "metal detecting is clearly an issue . . . but how big, is what the investigation will answer" (Lie 1997:4; auhtor's translation). From the public records, it is unclear whether the investigation was started by the Directorate and whether Økokrim reached any conclusions. According to at least one of the archaeologists I interviewed, there were also plans to develop national guidelines or recommendations for how to detect responsibly at the time, but the work was not finalized. Nevertheless, detectorists likely continued detecting, although there are very few reported finds recorded from the 1990s or early 2000s, a point to which I return later in the article.

Comparing the five-year time interval 2005–2009 to 2010–2014, the number of articles almost tripled from the former to the latter (Figure 4). Perhaps more interesting than the increase in itself is that almost all of the articles were interviews of metal detectorists or about private metal detecting. Archaeology and archaeologists were, when mentioned, almost exclusively described as either passive—and slow—receivers of finds or facilitators of metal-detecting rallies. The notion that detectorists were saving archaeological artifacts from slowly "dying" in the ploughsoil also became more prevalent. In 2012, a regional newspaper published an article with the heading "We Are the Red Cross of Hobby Archaeologists," a quote attributed to one of the detectorists that was interviewed. In the text, the detectorist explained his

statement: "Because what we actually do is rescue work on a volunteer basis, where we rescue cultural treasures. If we don't find these, they'll disappear" (Fosse 2012). This and similar statements has been, and continues to be, a popular trope among metal detectorists and those archaeologists who are positive toward the hobby who argue their hobby are saving the objects from "certain death" or "a death sentence" (e.g., Kvanli 2016; Kvanli and Søgaard 2016:42; Rolfsen 2016:122).

From 2014 Onward

As previously mentioned, there was a marked increase in the number of reported detecting finds at all of Norway's archaeological museum regions in 2014 (Figure 3). It is unlikely that the rising media attention on the activity was the only factor contributing to this. Given the resolution of the data, it could very well be the other way around; the increase in detecting activity led to more articles. It does, however, seem plausible that more awareness among both the public and heritage professionals about the existence of the hobby caused more people to start detecting and some already active detectorists to start reporting their finds and/or increase their activity—especially when considered in combination with the increasingly widespread use of social media platforms such as Facebook to connect with other hobbyists (e.g., Axelsen 2018; Axelsen et al. 2022).

At the same time as the rise in detecting activity, the Directorate halted all evaluations of requests for finder's fees (Gundersen et al. 2016:161) and worked on establishing a uniform national

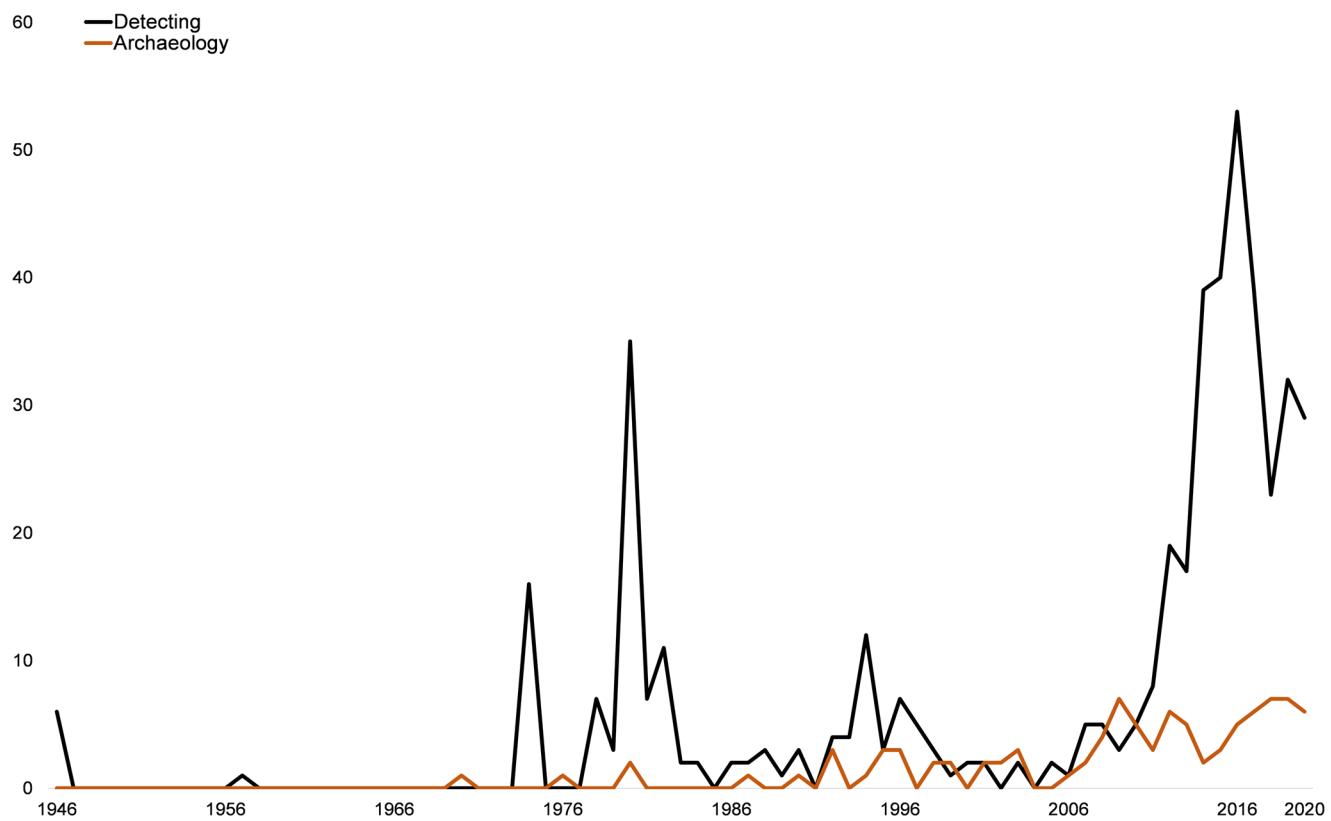


Figure 5. Yearly development of published texts about the use of metal detectors on archaeological projects or by hobby metal detectorists. Ads are not included in the numbers. The searches in the Norwegian National Library's digital archives were done on January 1, 2021.

standard beginning in 2014. That process was likely stalled because the Directorate also started developing national guidelines concerning the private use of metal detectors in 2015. The following year, a series of op-eds was published. On February 20, 2016, archaeologists Dagfinn Skre and Lars Pilø (2016b) argued that different opinions about the value of volunteer detectorists gathering archaeological objects from the plough layer had resulted in varying management practices in Norway's then 19 counties. In some areas, archaeologists working in the county municipalities would be quick to protect find-rich fields in order to hinder further metal detecting. As a result, metal detecting became illegal, but farmers were still allowed to continue ploughing. This was a practice Skre and Pilø (2016b:36; author's translation) described as "legally and professionally questionable." Their comment seemed to be spurred, at least partially, by an application sent by a metal detectorist to the Directorate for Cultural Heritage asking permission to continue searching on a field that had been protected—an incident, they argued, that "exemplified cultural heritage management's metal detecting dilemma" (Skre and Pilø 2016b:36; author's translation). Although the county municipality supported the detectorist's application, the museum responsible for the region was more apprehensive and recommended that it be rejected (Skre and Pilø 2016b:37).

Following the op-ed, the newspaper interviewed the metal detectorist behind the application (Larsen 2016b). Shortly after this, archaeologist Birgit Maixner also wrote an op-ed where she

described the practice of protecting fields after a few metal detecting finds as "constructing protected cultural heritage sites" (Maixner 2016; author's translation; see Maixner [2015] for similar arguments). By June, it was decided that the detectorist be allowed to continue searching the field (Skre and Pilø 2016a; for the results of the survey, see Sand-Eriksen 2019; Sand-Eriksen et al. 2020).

A consultation draft of the national "Guidelines for the Private Use of Metal Detectors" was also circulated in 2016. The document was met with very strong reactions from both the detecting and archaeological communities (Directorate for Cultural Heritage 2016). Shortly thereafter, one regional newspaper published an article with the title "Will Control Metal Detectorists with an Iron Fist," writing that several of the professional environments "reacted" to the draft (Hagan 2016; author's translation). In the article, the Directorate was described as wanting to have a "shorter leash on the country's detectorists" (Hagan 2016; author's translation). In October, a different newspaper wrote about two metal detectorists who had found gold and therefore were not allowed to continue detecting in that area. One of them argued that "if the regulations continue like they are now, we will have to empty an area before we report and hand in [finds]" (Fossum 2016; author's translation). He also stressed how he felt that they were "doing society a favour" by "saving historical valuables from being lost" (Fossum 2016; author's translation). This supports Gundersen's (2019:133) observations of how some

detectorists who participate in online debates perceive the protection of findspots as sites as akin to punishing those detectorists who follow the law and report their finds.

GUIDELINES

As the Ministry of Climate and Environment's advisory and executive body, the Directorate for Cultural Heritage implements the country's national cultural heritage policy. Consequently, any statements or work concerning for example hobby metal detecting receive a lot of attention, by the media and on social media platforms. The brief outline of the newspaper coverage above illustrates the former. The many articles and comments that were spurred by the development of national guidelines concerning responsible detecting and for stipulating a finder's fee are only two examples of this. Some of the most central aspects of the two guidelines, and a few responses to their implementations, are detailed in the following sections.

Guidelines for the Private Use of Metal Detectors

The national "Guidelines for the Private Use of Metal Detectors" was finalized and announced via a press release on June 29, 2017 (Directorate for Cultural Heritage 2017b). In the guidelines, the NCHA is contextualized, the sections most relevant for hobby detectorists are explained, and other relevant acts are specified. Additionally, the Directorate offers some recommendations for best practices that, although to some extent stricter than those of the NCHA, are relevant for those detectorists who also wish to apply for a finder's fee. Metal detectorists reporting finds discovered after the guidelines were implemented are, for example, now required to fill out an analogue find form with information about the landowner, the coordinates of the findspot, what type of land the object was found on, and at what depth (Directorate for Cultural Heritage 2019c).

The same form then follows the object through the archaeological management system. First, they are sent to the county where the object was found, or the Sámi Parliament, which is responsible for filling out a different part of the form and recording the relevant information in Askeladden. Then, the form and object is forwarded to the responsible regional archaeological museum (Figure 1), which fills out a third part. At the museums, the form is scanned and stored in a digital case and archiving system, as well as a physical archive, and all the information is once again manually typed into the museum's local artifact database.

The guidelines, along with the accompanying find form, were an attempt to unify management practices across county borders and museum regions. Before July 2017, some of the country's county municipalities and archaeological museums had developed and given vastly different recommendations for their respective regions, and the ways in which the finds were recorded—both in the counties and at the archaeological museum—varied immensely. In the counties that had existing guidelines, detectorists were advised to stay 5 m, 50 m, or 100 m away from automatically protected sites or monuments, with some including the discovery of a single protected object in this recommendation (Axelsen 2021:Table 3.1). Descriptions of what constituted

"responsible" metal detecting could change rather drastically when crossing county borders.

A couple of the detectorists that I interviewed lived on the outskirts of a county. At times, they had been extremely frustrated by how the rules changed from one county to another. It did not help that the attitudes toward and treatment of the detectorists differed too. Instead of dealing with county archaeologists who they felt met them with suspicion or even outright hostility, they had on several occasions simply circumvented that level of the heritage management system (Figure 2), reporting and handing in the objects they had found directly to the museums. Encouraging metal detectorists to deliver their finds directly to the respective regional archaeological museum is a practice that some of the counties specified as preferred in their regional guidelines (Axelsen 2021:72). The Directorate more or less put a stop to this practice in the mid-2010s by stressing that if the archaeological museums were to accept artifacts handed in directly from private finders, they also had to record them in Askeladden. This was to ensure that the counties have all the relevant information they need when, for example, allowing development projects to be conducted without having to pay for an archaeological survey beforehand.

Guidelines for Stipulating a Finder's Fee

On January 29, 2019, approximately one and a half years after the detecting guidelines were finalized, the Directorate published its national "Guidelines for Stipulating a Finder's Fee." Previously, only objects made of or consisting of gold or silver had been eligible for a reward, but the new guidelines also made room for several other factors to be considered, such as the cultural-historical value, the archaeological context, and the find circumstances (Directorate for Cultural Heritage 2019a:2–3). A find's potential cultural-historical value—that is, its information and research potential—was divided into five "value groups," with set price ranges for each group (Directorate for Cultural Heritage 2019a:2; see also Axelsen 2021:74–75). As already described in the section on finder's fees and ownership, a new requirement for a finder to be eligible for a financial reward was that they had followed all the recommendations in the "Guidelines for the Private Use of Metal Detectors" (Directorate for Cultural Heritage 2017a; see also Fjell and Holme 2020:138). The Directorate also stressed that the NCHA's "regulations of a finder's fee was introduced long before metal detecting was relevant. A finder's fee is less relevant when finds are made as a result of a conscious search than when a find is incidental" (Directorate for Cultural Heritage 2017a:4; author's translation). In addition, they specified that those participating in social searches arranged by the counties or archaeological museums, or on surveys that had received an exemption from Section 8 of the NCHA (i.e., archaeological surveys, excavations, or continued detecting on a protected site), would not be eligible for a fee (Directorate for Cultural Heritage 2017a:4).

In general, the detectorists and archaeologists I interviewed were rather negative toward the practice of awarding detectorists a finder's fee. Most said that it would be better to get rid of the arrangement all together. Almost all of the detectorists I spoke with expressed that the money should instead go toward financing the conservation of finds or further surveys and research (for contrasting observations in Denmark, see Dobat et al. 2019:13). Even so, a few of the detectorists that I interviewed after the

guidelines were finalized were concerned that the new “price list” would encourage those who were in fact motivated by the potential for monetary gain to take up the hobby. One detectorist stated, “I fear now that people will want to buy [a detector] because they believe they can earn money on it. And then they’ll get disappointed when they see what the rates are. And then maybe they’ll refrain from handing in the finds.” Those who were already detecting, he reasoned, already knew that there was no money in the hobby and were therefore motivated by other things. Comparing the Norwegian finder’s fee to the Danish *Danefæ* (“treasure trove”; Dobat and Jensen 2016:71; Petersen 2016), the detectorist described some of the more negative sides of the practice in Denmark, with detectorists almost “going to war” against each other over “walking on someone else’s field,” because that meant that one was indirectly stealing.

Current State of Affairs

The “Guidelines for the Private Use of Metal Detectors,” after being implemented for a few years, seemed to be accepted—and appreciated—among both the archaeologists and active metal detectorists I interviewed. This was partly reflected by the fact that very few people commented on them after the spring of 2018, other than to say that they seemed to work as intended. Conscientious and “responsible” detectorists were already detecting in a manner that complied with the guidelines, and they did not have to change their recording or detecting habits. In 2021, one archaeologist added that they were under the impression that some counties, however, did their best to avoid following the guidelines that had been set by the Directorate. As a result, the same regional variations the guidelines tried to curb may still exist. The varying practices and attitudes, the archaeologist argued, probably led to a “form of mistrust. Not to say a sort of ‘accept’ to cheat ‘a bit’ in some environments. Respect for the regulations is weakened when even public agencies consciously work against them.” The archaeologist questioned whether the coordinates given by some detectorists were correct, suggesting that some were consciously making sure that the distance between the object they found was big enough for them to continue detecting.

The usefulness of a finder’s fee arrangement is still under debate, both online and within the various heritage institutions. In an email written in 2021, one detectorist stated that he had received his first payment, describing the process leading up to it as “not particularly good.” Not wanting to go into detail, he added that he had experienced that detectorists who had found archaeological objects that were “more important and/or better (also from a scientific point of view)” than his had not received any reward. His impression was that, despite the price list, it still seemed random whether one received a reward or not—even though they had all done everything “according to the rule book.”

Although the Directorate is responsible for deciding which finds will be rewarded, it is up to the regional archaeological museums to recommend the size of the reward. Apart from a few cases that are discussed in a national council, with representatives from all of the regional museums, most of the recommendations are decided regionally. Consequently, there is little knowledge about the practices and decisions across museum regions. I return to this point after a brief discussion of the possible consequences of the varying historical and regional treatment of

hobby detecting and its practitioners. Other potential factors contributing to the discrepancy in the number of reported and recorded detecting finds and detectorists are also considered (Figure 3).

REGIONAL HOBBYISTS

It is difficult to ascertain to what degree the differing attitudes and practices among individual archaeologists at the country’s various archaeological museums and county administrations have affected the extent of hobby metal detecting in the country. Archaeologists who have been positive toward the hobbyists—some even including them on archaeological projects as early as the 1990s—may have led to (1) detectorists being more likely to report and hand in the objects they discovered and (2) more people detecting. In areas where archaeologists have been restrictive and negative toward hobby detecting, people may have still detected but chosen to not report and hand in their finds. The newspaper articles outlined above illustrate that metal detecting was a well-known hobby in Norway from at least the 1980s, but that media attention is not yet reflected in the artifact databases. Records show, however, that there is a small but steady stream of finds found from the 1950s onward that are being handed in today (Axelsen 2021:189).

There has been, and continues to be, a substantial difference in the distribution of both the number of recorded detecting finds and detectorists (Tables 1 and 2; Figure 3). There are close to 40 times as many artifacts resulting from private metal detecting recorded at the most “find-rich” museum as the one with the fewest number of finds. These trends have not changed from 2018 to 2022 (Axelsen and Fredriksen 2022). There are likely many causes for this discrepancy, besides the attitudes of individual archaeologists and heritage institutions. The main reason is probably the activity level of some detectorists, given that the area of cultivated land available to detect on or the population size and density does not seem to correlate with the number of reported and recorded finds (Tables 1, 2, and 3; Figure 6). A few detectorists detecting within certain counties or regions, such as at the Arctic University Museum of Norway, are extremely prolific. As a result, although Nordland County is one of the least densely populated counties, two detectorists had reported enough finds for it to have been the seventh most find-rich county when looking at the total number of recorded finds through 2018 (Table 2). There are also large differences between counties—and museums—in the number of finds recorded as having been found by hobby metal detectorists and the number of detectorists who are handing in protected objects (Axelsen and Fredriksen 2022).

Factors such as varying preservative conditions of the soil across the country (e.g., Haldenby and Richards 2010; Kibblewhite et al. 2015:250; Noble et al. 2019; Rowe 2019), a “true” difference in past activity, historical and current land use, and the landscape itself may also affect both the detecting activity and the possibility of discovering archaeological artifacts across the country (see, for example, Robbins [2013] for a discussion of such factors affecting the English and Welsh material). Metal-detecting finds in Norway are predominantly found on farmed land. This is in all likelihood due to them being handed in by responsible detectorists who want to and do cooperate with their local heritage authorities.

Table 3. The Number of Reported and Recorded Metal-Detecting Finds per County on August 12, 2019.

Museum	County	Recorded Finds	Population Density (per km ²)	Cultivated Land (km ²)	Land Area (km ²)
Museum of Cultural History	Østfold	1,514	77	708	3,889
Museum of Cultural History	Vestfold	1,440	117	393	2,149
Museum of Cultural History	Oppland	1,346	8	825	23,776
Museum of Cultural History	Hedmark	1,101	8	978	26,086
NTNU University Museum	Trøndelag	712	12	1,435	39,213
Museum of Cultural History	Akershus	703	136	718	4,579
Arctic University Museum of Norway/NTNU University Museum	Nordland	680	7	440	36,072
Museum of Archaeology	Rogaland	675	55	529	8,575
Museum of Cultural History	Buskerud	611	21	435	13,778
Arctic University Museum of Norway	Troms	574	7	205	24,869
Museum of Cultural History	Telemark	259	13	211	13,832
University Museum of Bergen/NTNU University Museum	Møre og Romsdal	200	19	421	13,958
Museum of Cultural History	Vest-Agder	132	28	138	6,677
University Museum of Bergen	Hordaland	129	36	187	14,494
Museum of Cultural History	Aust-Agder	121	14	96	8,305
Museum of Cultural History	Oslo	44	1,597	6	426
University Museum of Bergen	Sogn og Fjordane	42	6	248	17,661
Museum of Cultural History	Unknown	26	N/A	N/A	N/A
Arctic University Museum of Norway	Finnmark	13	2	78	45,755
Arctic University Museum of Norway	Unknown	1	N/A	N/A	N/A
Total		10,321		8,051	304,094

Note: Data on population, land area, and area of cultivated land has been calculated based on data from Statistics Norway's open-access tables "11342: Population and area (M) 2007–2020" and "11506: Agricultural area, by use (decares) (C) 1969–2021." Only "fulldyrka mark" ("arable land") in the category "cultivated land" is included. Surface-cultivated and infield pastures are therefore excluded.

What we know very little about is how common or uncommon it is to use metal detectors in mountain and forest areas among those who do not report their finds. Detecting in such areas is not, as already mentioned, illegal. If one has obtained permission from the landowner, anyone can use a metal detector in these areas. Although in general there has been less activity there than on more or less continuously farmed land, it is also very likely that any archaeological features are much closer to the surface because they are usually covered by less topsoil than those located on fields. Consequently, one risks disturbing an archaeological site, which is illegal—regardless of any previous knowledge about its existence.

RECORDING PRACTICES AND ACCESSIBILITY

As a result of the sudden increase in the number of reported metal-detecting finds in 2014 (Figure 3), there were, as already mentioned, previously varying ways of recording some of the information about the metal-detecting finds at the archaeological museums. For the older finds, this is an issue, because they can be hard to identify precisely as detecting finds in the databases. This is, of course, a result of there not having been, at the time, any predefined options for recording whether an object had been

found by hobby metal detectorists. Consequently, archaeologists who were recording the finds used various free text fields to add that information in different ways. Still, because of the increase in the yearly number of reported finds, these older records constitute a small proportion of the total number of detecting finds. Today, all objects reported and handed in by detectorists are recorded as being the result of *metallsøk* ("metal detecting") at the museums. The data field used to store this information, however, does not seem to follow all of the records that are exported from the closed artifact databases and published on the publicly available portal Unimusportalen. The finds are also not searchable as detecting finds on Kulturminnesøk.

Consequently, although all of the detecting finds are published on both sites, it is, for many of the finds, not possible to identify them as such. Detectorists will usually be able to find the objects they have handed in, because they know what to look for and can use the necessary search words—such as the object type—or the individual museum numbers that each artifact receives. Ideally, the detectorists should be informed about both attributes directly by the relevant regional museum when the find is fully cataloged, via an official letter of thanks, which can take four to five years (Axelsen 2021:172). For those who are curious about detecting finds in general, the portals are currently poor options. Using the now standardized search word "metal detecting" in Unimusportalen only results in approximately 2,200 hits. In March 2022,

- Museum of Cultural History
- Arctic University Museum of Norway
- NTNU University Museum
- Museum of Archaeology
- University Museum of Bergen

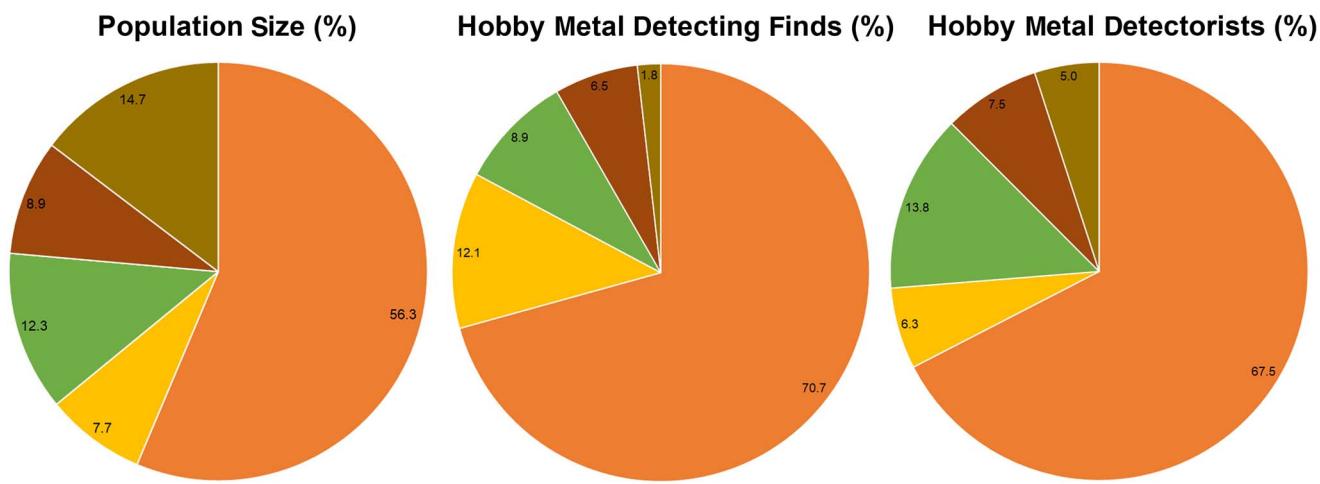


Figure 6. Pie charts showing the percentage distribution of population size, recorded metal detecting finds, and the number of recorded metal detectorists distributed between the archaeological museums. Data on population size have been collected from Statistics Norway's open-access table "11342: Population and area (M) 2007." The number of recorded detecting finds and recorded detectorists are from August 12, 2019.

there were almost 17,000 metal-detecting finds recorded in Norway's five artifact databases, of which 8,000–9,000 are fully cataloged (Axelsen and Fredriksen 2022). Given the time and resources spent on discovering, reporting, recording, and cataloging the detecting finds—both by volunteers and the many archaeological management institutions and employees involved—this is arguably just not good enough. Detectorists, the general public, and archaeologists and researchers who do not have access to the regional artifact databases should also be able to access the wealth of information and knowledge potential the detecting finds represent, in accordance with ratified conventions such as the Faro and Valetta Convention (see e.g. Dobat et al. 2020:282).

POSSIBLE SOLUTIONS

There are several changes that could be implemented in Norway to further improve and strengthen collaborations and communication between detectorists and archaeologists in the country. For some of those changes, Norway could look to what has already been successfully tested and implemented in other countries. Other potentially fruitful solutions, however, require changes at a national policy level, such as standardizing when to record an area with detecting finds as an archaeological site and thereby protecting it.

What is also needed is the development of formalized communication channels that makes the exchange of knowledge and experiences between the different archaeological heritage management institutions—and, preferably, interested citizens such as detectorists—possible. Much of the overarching management work is fairly standardized across the country's heritage

institutions. However, for those tasks that are relatively new, or continuously adjusted and developed—such as the recording of detecting finds and stipulating a finder's fee—the county administrations and regional archaeological museums do not have any set ways of cooperating or sharing their work. This is also true for information about the detectorists and their activity, and for information given by the detectorists, that does not fit into any of the predefined data fields in the various databases. As a consequence, this knowledge stays with individual archaeologists and is very unlikely to be findable in only a few years' time.

Benefits and Drawbacks of a Norwegian Public Finds Recording Scheme

A fairly straightforward—and basic—way of including the public in the heritage-making process is the crowdsourcing of data (e.g., Dobat et al. 2020:283; European Commission et al. 2022:20). This has been successfully introduced with public recording schemes, such as the Portable Antiquities Scheme (PAS) in England and Wales; Digitale Metaldetektorfund (DIME) in Denmark; MEDEA in Flanders, Belgium; PAN in the Netherlands; and SuAlt in Finland (see Wessman, Thomas, Rohiola, Koho, et al. [2019]:342–343] for an overview and discussion of the different schemes). Hobby metal detectorists, in particular, are eager for such systems to be implemented (Axelsen et al. 2022). Somewhat less straightforwardly, finds recording schemes require funding, and they must be adjusted to suit the relevant national legislation in the countries where they are used (e.g., Wessmann, Thomas, Rohiola, Koho, et al. 2019:342–343). Norway's already common standard for recording protected objects at the archaeological museums, combined

with the fact that there are only five regional museums and five databases, means that incorporating a public finds recording scheme into the Norwegian system would likely require less work than in many other countries.

It should, however, be noted that the situation concerning the legislation relevant to metal detecting, as well as the recording and storing of artifacts in Norway is quite different from that of, for example, England and Wales, and Denmark. For the latter, recording standards and practices concerning detecting finds is left to the many archaeological museums (Dobat et al. 2019:2). The introduction of a public finds recording scheme was therefore a response to a fragmented part of the archaeological record that was inaccessible to both researchers and the public (see Dobat and Jensen 2016:81). In Norway, on the other hand, this is less of an issue. Although there is, for example, a backlog of finds that have only been accessioned at some regional museums, other museums have fully recorded all of the reported detecting finds. These are already digitally available for researchers and the general public. What has been missing is a stringent way of recording the finds, which has made it difficult to search for and identify all of the material stemming from hobby metal detecting. An update of the open portals, Kulturminnesøk and Unimusportalen, and resources to standardize the ontology of the older metadata, is clearly needed, but the necessary information is already available in the artifact databases. Consequently, for those who wish to access, assess, and use the recorded data, there is less use for a public finds recording scheme in Norway than in many other places.

Of course, as argued by Dobat and colleagues, user engagement and the participatory nature of finds recording schemes offers a more democratic way for the public to interact with what is, essentially, “their” heritage: “Instead of passively consuming expert knowledge and narratives, detector users cherish the idea of actively contributing to the writing of history with their findings” (Dobat et al. 2019:4; see also, for example, Wessman, Thomas, and Rohiola 2019:4–5; Wessman, Thomas, Rohiola, Koho, et al. 2019:343). The find form that detectorists are currently asked to fill in and hand in along with the protected objects has little room for interpretations and the addition of information other than what is asked for by the authorities. This is clearly a less engaging reporting and recording system than an intuitive app. It could be argued that it is also not as accessible and therefore not as democratic as, for example, the Danish finds recording scheme.

A fairly low-cost solution that would save detectorists and archaeologists valuable time is digitizing the aforementioned analog find form that accompanies the detecting finds through the management system. Being able to use a smartphone or tablet to fill in the necessary information via a digital form, rather than on paper, would mean that it could be sent directly to the responsible authorities while the detectorists are still on site. Much of the necessary information, such as the coordinates of the find, could then be uploaded via the detectorist’s phone. Archaeologists working in the counties or the Sámi Parliament would then be able to import the data from the form and into Askeladden, fill out their part, and forward it to the responsible regional archaeological museum.

Employees at the museums should then be able to import the information into their systems, instead of manually typing it. This

would remove some of the risks of typing errors, which lessens the overall quality of the recorded data. The digitization of the find form is such an easy and practical solution that it may seem almost banal. It would, however, ease the process of recording detecting finds for everyone involved and therefore likely prove to be cost efficient. An alternative is to develop a finds and site recording app, compatible with Kulturminnesøk and the local artifact databases, in which the information now required in the find form could also be recorded. This would answer many of the wants—and needs—of both private citizens and the Norwegian archaeological heritage management system. Time and money should also be spent on ensuring that the detecting finds are indeed findable by the public, in accordance with the FAIR principles (Wilkinson et al. 2016; see also Richards et al. 2021). Combined, this would mean that high-quality records, co-collected and co-created by hobby metal detectorists and heritage practitioners, would be truly findable, accessible, interoperable, and reusable for all.

CONCLUDING REMARKS

Compared to England, Wales, and Denmark, hobby detecting is still a fairly uncommon pastime activity in Norway. In this article, I have emphasized the historical development of the hobby, in particular the public coverage of it, and the newly developed national guidelines that were introduced to ensure unity of governance. Despite the Directorate’s attempts to unify practices, there are still no clear rules for how many finds are necessary to define an area as a (potential) heritage site. There is also a need for formalized channels for communication and knowledge exchange in Norway—within the Norwegian archaeological heritage management system, among its employees, and between professionals and nonprofessionals. For now, a few key individuals at the various heritage institutions sit on a wealth of information on, among other things, best practices concerning the recording of finds, the stipulation of finder’s fees, and the trustworthiness of individual detectorists.

In a country with a national heritage act and national guidelines, it is troublesome that archaeologists working at one regional museum do not have access to, at the very least, general overviews of how many and which types of detecting finds have been reported, which ones are receiving a finder’s fee, and what the size of the fee is. Archaeologists who are working in counties lack information about how other counties are dealing with hobby detecting and detectorists, as well as what is taking place at the regional museums. It is hardly surprising that the end result is varying practices, given that the museums and counties only have their own knowledge and discretionary evaluations on which to base their decisions.

Acknowledgments

Permission to conduct the qualitative interviews, temporarily store the recorded data, and store transcripts long term were given by the Norwegian Research Centre for Research Data (NSD), which is now a part of Sikt–Norwegian Agency for Shared Services in Education and Research (reference number: 54729 / 3 / AMS). Thank you to Jan Kristian Hellan for making the map, and to Gonzalo Linares for the Spanish translation of the abstract.

Data Availability Statement

The data presented in this article were collected as part of my doctoral project, between 2017 and 2021. The transcribed interviews, without directly identifiable information, are—in accordance with research ethical guidelines in Norway—stored on a secure and closed server until March 2031. Figures and tables stem from searches in the closed and local artifact databases of the country's five archaeological museums and in the National Library's digital archives. The latter is open to everyone with a Norwegian IP address, although a few newspapers are only accessible with a university affiliation or from within the National Library's building. Detailed descriptions of the searches and choices concerning data cleaning in both databases is available in the thesis (Axelsen 2021), as well as more thorough overviews of the results.

Competing Interests

The author declares none.

NOTES

1. Literally, "loose cultural memories." The category is often translated as "moveable" or "portable heritage objects," and in the official translation of the NCHA, as "protected objects."
2. § 3 Prohibition against disturbing monuments and sites; § 4 Monuments and sites that are automatically protected; § 6 Security zone; § 12 Right of ownership of protected objects; § 13 Preservation, rewards, etc.

REFERENCES CITED

- Addyman, Peter V., and Neil Brodie
 2002 Metal Detecting in Britain: Catastrophe or Compromise? In *Illicit Antiquities: The Theft of Culture and the Extinction of Archaeology*, edited by Neil Brodie and Kathryn Walker Tubb, pp. 179–184. Routledge, London.
- Axelsen, Irmelin
 2018 Digital Archaeology. A Democratic Utopia. *Nordisk museologi* 2018(2–3):107–114. DOI:[10.5617/nm.6658](https://doi.org/10.5617/nm.6658).
- 2021 What's the Deal with Old Things? An Exploratory Study of Attitudes and Practices towards Certain Old Things among Archaeologists and Metal Detectorists in Norway. PhD dissertation, Department of Archaeology, Conservation and History, Museum of Cultural History, Faculty of Humanities, University of Oslo, Oslo.
- Axelsen, Irmelin, and Caroline Fredriksen
 2022 Organically Homegrown Archaeological Databases and Their Inherent "Messiness": The Curious Case of Hobby Metal Detecting in Norway. Manuscript on file with the Museum of Cultural History, University of Oslo.
- Axelsen, Irmelin, Suzie Thomas, and Vyktas Vaitkevičius
 2022 Digital Knowledge Production and Communication among Metal Detectorists: A Focus Group Discussion. *Journal of Community Archaeology and Heritage*. DOI:[10.1080/20518196.2022.2056818](https://doi.org/10.1080/20518196.2022.2056818).
- Bland, Roger
 2005 A Pragmatic Approach to the Problem of Portable Antiquities: The Experience of England and Wales. *Antiquity* 79:440–447. DOI:[10.1017/S0003598X00114218](https://doi.org/10.1017/S0003598X00114218).
- Børringbo, Inger Lise
 1997 Metallsøkere er en trussel. *Tønsbergs blad* 1997-05-14:13.
- Connor, Melissa, and Douglas D. Scott
 1998 Metal Detector Use in Archaeology: An Introduction. *Historical Archaeology* 32(4):76–85. DOI:[10.1007/BF03374273](https://doi.org/10.1007/BF03374273).
- Dahle, Kristoffer, Carl Fredrik Vemmestad, and Jarle Stavik
 2019 Metallsøkerfunn som grunnlag for kunnskap og vern: En case-studie fra Sunndal – et knutepunkt i jernalder og middelalder. *Primitive tider* 21:81–100. DOI:[10.5617/pt.7537](https://doi.org/10.5617/pt.7537).
- Deckers, Pieterjan
 2019 Archaeological Metal Detecting by Amateurs in Flanders: Legislation, Policy and Practice of a Hobby. In *Competing Values in Archaeological Heritage*, edited by Stuart Campbell, Liz White, and Suzie Thomas, pp. 103–123. Springer International, Cham, Switzerland. DOI:[10.1007/978-3-319-94102-8_8](https://doi.org/10.1007/978-3-319-94102-8_8).
- Directorate for Cultural Heritage
 2016 *Riksantikvarens retningslinjer for privat bruk av metallsøker*. Høringsuttalelser, Oslo.
- 2017a *Retningslinjer. Privat bruk av metallsøker* [Guidelines for the Private Use of Metal Detectors]. Directorate for Cultural Heritage, Oslo.
- 2017b Nye retningslinjer for privat metallsøking. Electronic document, <https://www.riksantikvaren.no/siste-nytt/pressemeldinger/nye-retningslinjer-for-privat-metallsokning/>, accessed January 29, 2021.
- 2019a *Retningslinjer. Fastsettelse av finnerlønn* [Guidelines for Stipulating a Finder's Fee]. Directorate for Cultural Heritage, Oslo. Electronic document, https://ra.brage.unit.no/ra-xmui/bitstream/handle/11250/2582716/Fastsettelse_finnerlC3B8nn.pdf?sequence=1&isAllowed=y, accessed April 4, 2022.
- 2019b Cultural Heritage Management at County Level. Electronic document, <https://www.riksantikvaren.no/en/About-Us/Cultural-Heritage-Management-at-County-Level>, accessed January 2, 2019.
- 2019c *Funnskjema – metalldetektorfunn* [Find Form – Metal Detecting Finds]. Electronic document, <https://www.riksantikvaren.no/wp-content/uploads/2019/10/funnskjema2019.pdf>, accessed April 13, 2022.
- 2020 About Cultural Heritage Management. Electronic document, <https://www.riksantikvaren.no/en/about-the-directorate-for-cultural-heritage/2020/>, accessed December 17, 2020.
- Dobat, Andres S.
 2013 Between Rescue and Research: An Evaluation after 30 Years of Liberal Metal Detecting in Archaeological Research and Heritage Practice in Denmark. *European Journal of Archaeology* 16:704–725. DOI:[10.1179/1461957113Y.0000000041](https://doi.org/10.1179/1461957113Y.0000000041).
- Dobat, Andres Siegfried, Torben Trier Christiansen, Mads Dengsø Jessen, Mogens Bo Henriksen, Peter Jensen, Stine Vestergaard Laursen, Rikke Ruhe, Mads Kähler Holst, and Freddy Arntsen
 2019 The DIME Project: Background, Status and Future Perspectives of a User Driven Recording Scheme for Metal Detector Finds as an Example of Participatory Heritage. *Danish Journal of Archaeology* 8:1–15. DOI:[10.7146/dja.v8i0.111422](https://doi.org/10.7146/dja.v8i0.111422).
- Dobat, Andres S., Pieterjan Deckers, Stijn Heeren, Michael Lewis, Suzie Thomas, and Anna Wessman
 2020 Towards a Cooperative Approach to Hobby Metal Detecting: The European Public Finds Recording Network (EPFRN) Vision Statement. *European Journal of Archaeology* 23:272–292. DOI:[10.1017/eaa.2020.1](https://doi.org/10.1017/eaa.2020.1).
- Dobat, Andres S., and Astrid T. Jensen
 2016 "Professional Amateurs." Metal Detecting and Metal Detectorists in Denmark. *Open Archaeology* 2:70–84. DOI:[10.1515/opar-2016-0005](https://doi.org/10.1515/opar-2016-0005).
- European Commission, Directorate-General for Research and Innovation, and Mukti Haklay
 2022 *Mutual Learning Exercise on Citizen Science Initiatives: Policy and Practice: First Topic Report, Introduction and Overview of Citizen Science: Horizon Europe Policy Support Facility*. Electronic document, <https://data.europa.eu/doi/10.2777/29886>, accessed April 8, 2022.
- Fjell, Sindre, and Jørn Holme
 2020 Kapittel III - Løse kulturminner. In *Kulturminnevern: Kulturminneloven med kommentarer*, edited by Jørn Holme, pp. 122–141. 3rd ed. Riksantikvaren/Økokrim, Oslo.
- Fosse, Dag-Henrik
 2012 Vi er hobbyarkæologenes Røde Kors. *Stavanger Aftenblad*, April 30:4–5.

- Fossum, Tommy
2016 Fant gull, men nå får de ikke lete mer. *Adresseavisen*, October 22:14.
- Gundersen, Jostein
2019 No Room for Good Intentions? Private Metal Detecting and Archaeological Sites in the Plow Layer in Norway. In *Competing Values in Archaeological Heritage*, edited by Stuart Campbell, Liz White, and Suzie Thomas, pp. 125–138. Springer International, Cham, Switzerland.
DOI:10.1007/978-3-319-94102-8_9.
- Gundersen, Jostein, Josephine M. Rasmussen, and Ragnar Orten Lie
2016 Private Metal Detecting and Archaeology in Norway. *Open Archaeology* 2:160–170. DOI:10.1515/opar-2016-0012.
- Hagan, Gaute Ulvik
2016 Vil styre metallsøkere med jernhånd. *Trønder-Avisa*, October 13:16–17.
- Halden Arbeiderblad
1981a Amatørarkeologer med metalldetektor: Skattejakt på Fredriksten. *Halden Arbeiderblad*, July 14:1.
- 1981b Riksantikvaren oppbrakt over skattejakten: Vil ødelegge arkeologiske utgravninger for all fremtid. *Halden Arbeiderblad*, July 17:1.
- Halderby, David, and Julian D. Richards
2010 Charting the Effects of Plough Damage Using Metal-Detected Assemblages. *Antiquity* 84:1151–1162. DOI:10.1017/S0003598X00067144.
- Hegge, Liss
1982 På skattejakt med elektronisk søker. *Aftenposten*, October 27:8.
- Immonen, Visa, and Joonas Kinnunen
2016 “Quidditching” and the Emergence of New Heritage Identities—Amateur Metal Detecting in Finland. *Public Archaeology* 15:163–185. DOI:10.1080/14655187.2017.1352188.
- Jordal, Ellen, Espen Uleberg, and Brit Hauge
2012 Was It Worth It? Experiences with a CIDOC CRM-Based Database. In *Revive the Past. Proceeding of the 39th Conference on Computer Applications and Quantitative Methods in Archaeology. Beijing, 12–16 April 2011*, edited by Mingquan Zhou, Iza Romanowska, Zhongke Wu, Pengfei Xu, and Philip Verhagen, pp. 255–260. Pallas Publications, Amsterdam.
- Kibblewhite, Mark, Gergely Tóth, and Tamás Hermann
2015 Predicting the Preservation of Cultural Artefacts and Buried Materials in Soil. *Science of The Total Environment* 529:249–263. DOI:10.1016/j.scitenv.2015.04.036.
- Kvanli, John
2016 Hvem skal redde Norgeshistorien fra plogen? Electronic document, <https://forskning.no/meninger/kronikk/2016/01/oldsaker-og-metallsoking>, accessed March 28, 2018.
- Kvanli, John, and Lars Søgaard Sørensen
2016 Om metallsøking i Norge og formålstjenlig kulturvern av løse gjenslakter i pløyelaget. *Fornvennen* 111:41–45.
- Larsen, Dag Eivind Undheim
2016a Vil ha slutt på fredning. *Klassekampen*, June 3:22–23.
- 2016b Vil søke på fredet grunn. *Klassekampen*, February 22:22–23.
- Lie, Kari
1997 Urettferdig og tendensiøst. *Østlands-Posten*, May 26:4.
- Maixner, Birgit
2015 Én lov - ulik forvaltningspolitikk: Om norsk forvaltningspraksis rundt privat metallsøking i pløyjord og dens konsekvenser. *Fornvennen* 110 (3):201–213.
- 2016 Spare seg til fant. *Klassekampen*, February 27:40.
- Makowska, Agnieszka, Agnieszka Oniszczuk, and Marcin Sabaciński
2016 Some Remarks on the Stormy Relationship between the Detectorists and Archaeological Heritage in Poland. *Open Archaeology* 2:171–181. DOI:10.1515/opar-2016-0013.
- Matsumoto, Mieko, and Espen Uleberg
2015 Digitizing Archaeology in Norway. In *Condition.2015 – Conservation and Digitalization*, edited by Katarzyna Piotrowska and Piotr Konieczny, pp. 159–164. National Maritime Museum, Gdańsk, Poland.
- Matsumoto, Mieko, and Espen Uleberg
2021 Curation of Digital Archaeological Data in Norway. *Internet Archaeology* 58. DOI:10.11141/ia.58.29.
- National Library of Norway
2022 Aviser. Electronic document, <https://www.nb.no/samlingen/aviser/>, accessed April 11, 2022.
- Noble, Gordon, Peter Lamont, and Edouard Masson-Maclean
2019 Assessing the Ploughzone: The Impact of Cultivation on Artefact Survival and the Cost/Benefits of Topsoil Stripping prior to Excavation. *Journal of Archaeological Science: Reports* 23:549–558. DOI:10.1016/j.jasrep.2018.11.015.
- Olsen, Bjørn E.
1978 Skattejakt med metallsøker. *Nordlandsposten*, December 7:13.
- Opland, Egil M.
1997 Stanser oldsakleting med metallsøkere. *Adresseavisen*, May 3:12.
- Oppland Arbeiderblad
1990 Kirketomt-hærjinger kan bli politianmeldt. *Oppland Arbeiderblad*, April 10:3.
- Petersen, Peter Vang
2016 Håndtering af metalldetektorfund på Nationalmuseet. In *Pløyjord som kontekst: Nye utfordringer for forskning, forvaltning og formidling*, edited by Jes Martens and Mads Ravn, pp. 37–50. Portal, Oslo.
- Pitblado, Bonnie L.
2014 How Archaeologists and Artifact Collectors Can—and Should—Collaborate to Comply with Legal and Ethical Antiquities Codes. *Advances in Archaeological Practice* 2:338–352. DOI:10.7183/2326-3768.2.4.338.
- Rasmussen, Josephine M.
2014 Securing Cultural Heritage Objects and Fencing Stolen Goods? A Case Study on Museums and Metal Detecting in Norway. *Norwegian Archaeological Review* 47:83–107. DOI:10.1080/00293652.2014.899616.
- 2015 Thesaurus inventus: Jordgravet gods og et gammelt juridisk problem. *Nicolay arkeologisk tidsskrift* 125:5–11.
- Richards, Julian D., Ulf Jakobsson, David Novák, Benjamin Štular, and Holly Wright
2021 Digital Archiving in Archaeology: The State of the Art. *Introduction. Internet Archaeology* 58. DOI:10.11141/ia.58.23.
- Robbins, Katherine J.
2013 Balancing the Scales: Exploring the Variable Effects of Collection Bias on Data Collected by the Portable Antiquities Scheme. *Landscapes* 14:54–72. DOI:10.1179/1466203513Z.0000000006.
- Rolfsen, Perry
2016 Det rette pipet. Metalldetektorbruk i Norge. In *Pløyjord som kontekst: Nye utfordringer for forskning, forvaltning og formidling*, edited by Jes Martens and Mads Ravn, pp. 111–126. Portal, Oslo.
- Rowe, Samantha A.
2019 Factors Affecting the Survival of Metal Ploughsoil Assemblages: An Assessment of Lead Bullets From 17th-Century Fields of Conflict. PhD dissertation, University of Huddersfield, United Kingdom.
- Sand-Eriksen, Anette
2019 Rapport: Arkeologisk utgraving: Bosetningsspor og jernvinne på Storhov. Submitted to Museum of Cultural History, University of Oslo, Oslo.
- Sand-Eriksen, Anette, Dagfinn Skre, and Arne Anderson Stamnes
2020 Hvordan har metallgjenstander funnet veien til pløyelaget? Resultater fra et metodisk prøveprosjekt på Storhov i Elverum. *Primitive Tider* 22:75–94. DOI:10.5617/pt.8395.
- Skre, Dagfinn, and Lars Pilø
2016a En løsning på dilemmaet. *Klassekampen*, June 3:18.
- 2016b Metallsøkerdilemmaet. *Klassekampen*, February 20:36–37.
- Thomas, Suzie
2012 How STOP Started: Early Approaches to the Metal Detecting Community by Archaeologists and Others. In *Community Archaeology: Themes, Methods and Practices*, edited by Gabriel Moshenska and Sarah Dhanjal, pp. 41–57. Oxbow, Oxford.
- Thomas, Suzie, and Bonnie L. Pitblado
2020 The Dangers of Conflating Responsible and Responsive Artefact Stewardship with Illicit and Illegal Collecting. *Antiquity* 94:1060–1067. DOI:10.15184/aaq.2019.201.
- Tonning, Christer, Ragnar Orten Lie, Vibeke Lia, Manuel Gabler, and Wolfgang Neubauer
2017 Er de alle løsfunn? Metallsøkfunn og potensialet for bevart kontekst under pløyelaget. *Viking* 80:223–242. DOI:10.5617/viking.5481.

- Valetta Convention
1992 European Convention on the Protection of the Archaeological Heritage (revised). Electronic document, <https://lovdata.no/dokument/TRAKTATEN/traktat/1992-01-16-1>, accessed April 11, 2022.
- Wessman, Anna, Suzie Thomas, and Ville Rohiola
2019 Digital Archaeology and Citizen Science: Introducing the Goals of FindSampo and the SuALT Project. *SKAS* 2019(1):2–17.
- Wessman, Anna, Suzie Thomas, Ville Rohiola, Mikko Koho, Esko Ikkala, Jouni Tuominen, Eero Hyvönen, Jutta Kuitunen, Helinä Parviainen, and Marianna Niukkanen
2019 Citizen Science in Archaeology: Developing a Collaborative Web Service for Archaeological Finds in Finland. In *Transforming Heritage Practice in the 21st Century: Contributions from Community Archaeology*,

edited by John H. Jameson and Sergiu Musteață, pp. 337–352. Springer International, Cham, Switzerland. DOI:[10.1007/978-3-030-14327-5_23](https://doi.org/10.1007/978-3-030-14327-5_23).

Wilkinson, Mark D., Michel Dumontier, IJsbrand Jan Aalbersberg, Gabrielle Appleton, Myles Axton, Arie Baak, Niklas Blomberg, et al
2016 The FAIR Guiding Principles for Scientific Data Management and Stewardship. *Scientific Data* 3(1). DOI:[10.1038/sdata.2016.18](https://doi.org/10.1038/sdata.2016.18).

AUTHOR INFORMATION

Irmelin Axelsen ■ Museum of Cultural History, University of Oslo, Oslo, Norway (irmelin.axelsen@khm.uio.no), corresponding author