What Imported Viking Age and Medieval Artifacts Can Tell Us about Trade and Exchange in Mývatn, Iceland

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ABSTRACT: The Mývatn region in northern Iceland has been receiving archaeological attention since at least the nineteenth century, with more intensive work having been carried out by Fornleifastofnun Íslands (FSÍ) in the late twentieth century, continuing to the present. The archaeological evidence suggests that Mývatn has been a region onto itself since the Settlement Period of Iceland through to the end of the Viking age. Imported goods such as whetstones and steatite demonstrate tell-tale characteristics of objects traded for in low quantities and over infrequent time periods. This article examines how Mývatn Icelanders were able to partially connect to the continental trade in beads, the Baltic trade in flint, and to other European trade networks operating between the 9th and 15th centuries, and to what extent these networks were able to influence the early Mývatn economy.

RÉSUMÉ: La région de Mývatn dans le nord de l'Islande a fait l'objet de l'attention des archéologues au moins depuis le XIXe siècle, avec un travail plus intensif réalisé par le *Fornleifastofnun Íslands* (FSI) (l'Institut d'archéologie d'Islande) de la fin du XXe siècle jusqu'à ce jour. La preuve archéologique suggère que Mývatn fut une région en elle-même à partir la période de colonisation de l'Islande jusqu'à la fin de l'ère Viking. Des produits importés tels que des pierres à aiguiser et de la stéatite démontrent des caractéristiques révélatrices d'objets échangés en faibles quantités et sur de rares périodes. Cet article examine comment les Islandais de Mývatn furent capable de se connecter en partie au commerce de perles continental, au commerce de silex de la Baltique et à d'autres réseaux de commerce européens ayant cours entre le IXe et le XVe siècles, et dans quelle mesure ces réseaux purent influencer les débuts de l'économie Mývatn.

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Historical Overview of Icelandic Settlement, Trade, and Exchange

It could be argued that Iceland is the only place on Earth with no pre-history. The *Book of Settlements*, known in Icelandic as *Landnámabók*, tells us that a few early settlers preceded the Vikings but that their historic impact was negligible. These men were believed to have been Irish monks but very little archaeological evidence has survived to support this theory, even if certain place names in Iceland are tantalizingly suggestive of their presence.[1] However, if such Irish monks did exist in Iceland then they were soon to be driven out by an overbearing presence that we refer to today as the Vikings. The Vikings' arrival in Iceland has been well-documented and their discovery of the island and eventual mass migration marks the beginning of Iceland's history, in every sense.

No one knows exactly why the Vikings re-located en masse to Iceland around the year 870 but two of the more popular theories have been cited as overpopulation leading to a lack of resources in Scandinavia, and as a rebellion of Harald Fairhair's tyrannical rule in Norway. What we do know for sure is that Vikings began settling Iceland in the 9th century[2] and that their settlement was on a very large scale over a relatively short period of time.[3] Five sixths of the settlers arriving in Iceland are believed to have come from Norway (Eldjárn 1956), and Orri Vésteinsson (1998) suggests that the majority would have come from the southwest. Accordingly, we can assume that there was a close connection between Norway and Iceland during the Settlement Period, either through kinship or culture, or perhaps both.

In terms of trade it is believed that the northwest and far east of Iceland relied as much on marine resources for their economy as animal husbandry. The rest of Iceland ostensibly relied more on animal husbandry. Ian Miller describes the Settlement Period of Iceland as one void of towns or villages; individual farmsteads were self-sufficient but likely traded with the fisheries along the coasts for marine resources, with the likeliest form of exchange being fish for farm products. Miller also states that there was a gift-giving economy in Viking age Iceland but that barter was often used in market situations. Bruce Gelsinger agrees that the Icelandic economy was largely based on self-sufficiency for the first 400 years after initial settlement and stresses that foreign trade would have been rare. According to Gelsinger foreign trade, when it did occur, would have likely been limited to Norwegian contacts. Kirsten Hastrup cites the lack of wood in Iceland as being a main deterrent to initiating foreign trade after the 12th century and, indeed, the situation becomes so bad that by the time Norway usurped power

over Iceland, in 1264, a particular sticking point for Icelanders in the resulting edict was a promise by Norway to send six ships to Iceland annually in order to conduct foreign trade, with the hope that this would re-stimulate the trading endeavor between them. During the Middle Ages, when Iceland was incorporated more wholly into the wider networks of European trade, stockfish is argued to have become an ever more important export. So important was the Icelandic dried fish that merchants from the English and Hanseatic regions were lured to Iceland to conduct trade there directly with Icelanders from the 15th century onwards (Gardiner and Mehler).

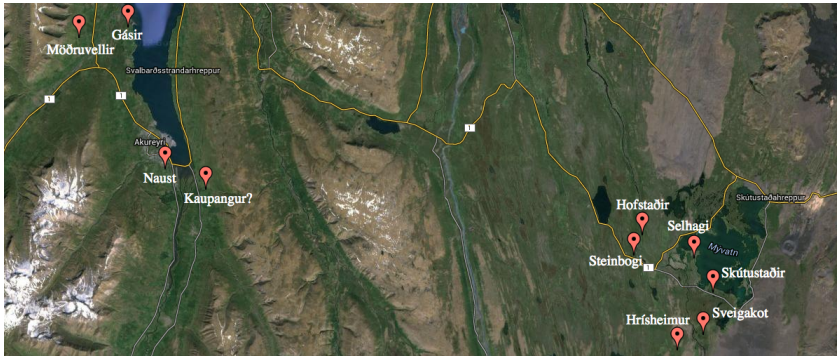

Figure 1: An overview of the most prominent sites described in this paper around Lake Mývatn and the base of Eyjafjörður

Introduction to the Present Research

This study examines the material culture found in Mývatn, with a particular focus on the imported artifacts. It sheds light on many 9th- to 15th-century questions, such as how Mývatn Icelanders were able to partially connect to the continental trade in beads, the Baltic trade in flint, the European trade in pottery, and the Norwegian trade in steatite and whetstones. It also addresses the degree to which these networks were able to influence the early Mývatn economy.

For the purposes of this article I have defined the boundaries of Mývatn as stretching from the area around Lake Mývatn to the western shores of Eyjafjörður. This region encompasses the important site of Hofstaðir, believed to have been a chieftain's estate with a prominent pagan feasting hall, as well as the site of Gásir and all of the farms inbetween. Gásir was a known medieval trading site that would have had an influence over the Mývatn region. Hanseatic and English ships would have exchanged goods there with Mývatn Icelanders from the 15th century. However, before the so-called Hanseatic or English Trading Period, goods from these regions would have generally been brought to Iceland by way of

Norway or Denmark, entering Mývatn through Kaupangur. The putative site of Kaupangur also falls within my catchment area although its exact location has yet to be determined. Based on written sources, however, Kaupangur is believed to have been a trading site in the Mývatn region that pre-dated Gásir (Jónsson). Three kilometers west from Gásir is a nearby monastery called Möðruvellir, which I have also included due to its association with Gásir (Harrison). Möðruvellir was an important farmstead that also housed a church since the late 12th century and was established as a House of Canons at the end of the 13th century. All ecclesiastical activities at Möðruvellir were supported by the farmstead and the site also seems to have been economically tied to Gásir based on 14th-century documents (Harrison, Roberts, and Adderley).

Like the rest of Iceland, Mývatn was settled during the Settlement Period in the 9th and 10th centuries. The Mývatn region in northern Iceland has been receiving archaeological attention since at least the nineteenth century, with more intensive work having been carried out by Fornleifastofnun Íslands (FSÍ) in the late twentieth century, continuing to the present. In particular, Ramona Harrison (2010) has been leading a project since 2006 called the Gásir Hinterlands Project. This project aims to understand the environmental relationships between farms in the Eyjafjörður region as well as the regional trading economy that was presumably centred around the medieval marketplace at Gásir. Sigrid Cecilie Juel Hansen (2009) has also taken a regional overview to her study of whetstones in Mývatn. She has since determined that whetstones were exchanged rather infrequently within the region and that they were homogenous in their distribution, indicating that early Mývatners relied on the same foreign trade contacts or that a common redistribution centre supplied the entire region.

For my own research I have attempted to discount any artifacts that may have been from a later context than the 15th century. This was done to keep a secure comparative focus on artifacts that were definitely from the Viking age or medieval period. I have largely used interim reports for my information (FSÍ Archaeological Reports). However, published final reports are used whenever possible. From my investigation it is evident that there is a fairly even distribution of excavated Viking age settlement sites to excavated medieval settlement sites within the Mývatn region. The excavated Viking age sites include: Hofstaðir, Skútustaðir, Sveigakot, Hrísheimar, Naust, and Höfðagerði at Núpar. Half of these sites have been excavated in earnest while the other three have received considerably less attention. The three sites that have seen the most work are: Hofstaðir, Skútustaðir, and Sveigakot. Hofstaðir has been a focus for investigation for over a century with more intensive work having been carried out over the last two decades. Consequently, it has been thoroughly excavated and provides researchers with rich data. Skútustaðir may be classified as one of the better excavated sites in the Mývatn region as well, with work commencing there in 2007 and continuing to the present day. Sveigakot has also been well excavated

with the site having seen continual fieldwork from 1998 to 2004. Hrísheimar, however, has only seen minimal excavation work during the early portion of the 21st century.[4] Work at Hrísheimar has concentrated on the iron production part of the site, the middens, and one sunken feature or structure below a midden. Similarly, Naust only saw one field season of salvage archaeology in 2007 and has thus not been excavated to its fullest potential. Höfðagerði has only seen two seasons of fieldwork and has yet to produce any imported Viking age artifacts.

The medieval sites include: Skútustaðir, Gásir, Möðruvellir, Ingiríðarstaðir, and Höfðagerði. Skútustaðir has already been discussed as one of the better excavated sites in the region. Its long lifespan allows it to be included as both a Viking age site as well as a medieval site. Gásir is also one of the more fully excavated sites of the Mývatn region with extensive work having taken place there over the last decade; in total an area of 1170 square meters have been covered, sometimes down to a depth of two meters. Möðruvellir has only been partially excavated as most work has been focused on its midden. A pagan burial at Möðruvellir was also excavated in the 19th century by Kristian Kaalund, but that data has been included in the pagan burials table, which I will discuss in more detail later. Like the Viking age sites, approximately half of the medieval sites have seen considerably less fieldwork.[5] One of the two lesser excavated sites is Ingiríðarstaðir—one of five farmsteads found in the Þegjandadalur valley. Ingiríðarstaðir was targeted for investigation in 2006 by FSÍ, but the site has only received minimal attention since that time. The other sparsely excavated site is that of Höfðagerði. Excavations began at Höfðagerði in 2002 and consisted chiefly of survey work and sampling during the first field season. Multiple enclosures were suggestive of a series of phases to the site[6] and dating suggests a continued period of activity at Höfðagerði from pre-1104 CE to the 15th century. The last year excavations were carried out was in 2003. During this final field season the Viking age complex of the site received the most attention, though only the hall was excavated in earnest and there were no artifacts recovered from this context that were suggestive of foreign exchange. To date, most diagnostic imported goods found at Höfðagerði come from a medieval period context, although some may be of an earlier date. Due to such chronological uncertainty I have included a table at the end of this paper listing sites where the artifact dating is less certain,[7] although all objects recorded in this table are definitely from either the Viking age or medieval period, in accordance with my chronological parameters. The settlement sites that I have included in this mixed table are: Höfðagerði, Hrísheimar, Selhagi, Skútustaðir, Steinbogi, and Svigakot. Only Selhagi and Steinbogi have not been mentioned already. Selhagi is a suggested high to middle class[8] farmstead located on a peninsula in Lake Mývatn that has been tentatively dated to between the 10th and 13th centuries. It was first excavated in 1990 by amateur archaeologist Jón Sigurgeirsson and then again in 1998 by FSÍ. Some minor work was carried out at Selhagi in 2001, but the site remains largely

unexcavated. Nevertheless, what is known of Selhagi is that it consisted of a multi-room dwelling and an associated midden. Steinbogi has also only been minimally excavated, with salvage archaeology commencing there in 2002 in advance of imminent roadwork construction. The site consists of a field boundary wall and several structures, datable to between the 9th and 13th centuries. With these occasional exceptions notwithstanding, all other artifacts should appear in either table 4 or table 6 at the end of this paper, depending on the certainty of their dating as either Viking age or medieval.

As mentioned previously, the distribution of excavated Viking age sites to medieval sites is fairly even. However, there have also been a number of pagan burials (often referred to by academics in Iceland by their Icelandic name, *kuml*) excavated in the Mývatn region, which I have included in their own separate table. Due to this, more Viking age sites in total have been excavated, even if the pagan burials tend to be small-scale excavations. Overall, forty-four pagan burials have been excavated in the Mývatn area, although only twenty-five are listed below as the remaining nineteen did not contain anything of importance towards the current discussion. In general, the pagan burials have proven to contain a large number of imported flint, whetstones, beads, and weapons. Other imported objects are generally not found in large quantities in pagan graves, as can be seen in the chart below:

kuml	Flint	Coins	Whet-stones	Beads	Spindle whorls	Weapons
Dalvík - Brimnes (14)			1.23%	10.95%		7.14%
Glaumbær (6)						3.57%
Sílastaðir (4)	6.45%	40.00%	1.23%	5.11%		17.86%
Baldursheimur			0.61%	0.73%		7.14%
Gautlönd			0.61%			
Hrafnsstaðir			0.61%			
Skógar			0.61%			
Ytra-Garðshorn (10)	6.45%			24.09%		3.57%
Dalvík - Böggvisstaðir						3.57%
Laufás						3.57%
Bringa						7.14%

kuml	Flint	Coins	Whet-stones	Beads	Spindle whorls	Weapons
Framdallir						7.14%
Sakka						3.57%
Ytra-Hvarf (2)						3.57%
Hrísar					5.56%	
Grímsstaðir						3.57%
Hámundarstaðaháls						3.57%
Kálfborgará (5)				1.46%		3.57%
Kroppur (2)						3.57%
Vindbelgur						3.57%
Ytri-Neslönd						3.57%
Ytri-Tjarnir						3.57%
Ystafell						3.57%
Möðruvellir		20.00%				
Björk				20.44%		

Table 1: Percentage of imported artifacts recovered from pagan burial sites within the overall Mývatn region

The numbers listed above show the percentage of finds at each site from the total number found within the entire Mývatn region. Multiple graves have a bracketed number after the name, indicating the number of graves found at that site. Blank spaces in the table represent a value of 0% and categories not listed in the table can be assumed to represent a value of 0% at every listed site.[9] The same format is used for tables 3 through 6, which represent artifacts found at settlement sites from a Viking age context, a mixed Viking age and medieval context, and a solely medieval period context, respectively. Naturally, I have attempted to place all artifacts within either a strict Viking age or medieval period context whenever possible.

The Imported Goods

I will begin my discussion with an overview of the flint that has been found in the Mývatn region. Thirty-one pieces of flint have been found in total, with only

12.9% coming from pagan burials.[10] The entirety of that 12.9% came from just two pagan burials: Sílastaðir and Ytra-Garðshorn. One other flint fragment, from the settlement site of Hofstaðir, came from an unknown context. The remaining flint comes from four sites: Hofstaðir, Hrísheimar, Skútustaðir, and Gásir.[11] The majority of the flint seems to come from a Viking age context, with the only secure medieval flint coming from Gásir. Interestingly, a large portion of the flint has been found at Viking age Hrísheimar, despite that site receiving comparatively little archaeological attention. Flint is found along the northern shores of the Mediterranean or along the northern shores of continental Europe, especially along the Baltic Sea but also in France and England, and would have likely been brought to Iceland from Europe through intermediary Scandinavian trade networks. During the Viking age flint was often used for strike-a-lights. Quartz, obsidian, and jasper could also be used for strike-a-lights but all of those materials can also be found in Iceland and are therefore not necessarily indicative of foreign exchange. Below is a breakdown of recovered flint in the Mývatn region by chronology. The large amount of flint found at Hrísheimar increases the likelihood of even more Viking age flint being found in the future:

	Percentage of overall Flint Fragments
9th-11th Century	59.38%
10th-13th Century	3.13%
12th-15th Century	25.00%
Unknown context	12.50%

Table 2: Flint fragments recovered from all contexts within the Mývatn region

Twenty-nine objects of steatite/soapstone have been found in the Mývatn region, the majority being vessel sherds or spindle whorls, although one gaming piece and one net sinker have also been found. One piece of steatite was from an undatable context. Steatite has only been found at settlement sites,[12] primarily from Viking age contexts, although the large portion of undiagnostic soapstone found at Sveigakot has the potential to alter that data considerably.[13] As previously mentioned, Sveigakot has been thoroughly excavated and its steatite now awaits final publication for precise dating. Like the flint, a large portion of steatite has been found at Hrísheimar despite its scant archaeological attention. This gives the promise of even more Viking age steatite being found in the future. In terms of exchange, steatite can be quarried in the Shetland Islands, southern England, or in Greenland, although most steatite found in Iceland is attributed to quarries in Norway (Eldjárn 1958). The steatite in Mývatn seems to be largely reworked, indicating that the material was not traded in high quantities there.

One hundred and sixty-three whetstones have been found in the Mývatn region, with three coming from an unknown context. Whetstones are generally traceable to Norway and two main types are recognized: a lighter schist described as the Eidsborg type and a darker type of schist. The Eidsborg schist, as the name suggests, is quarried in Eidsborg, Telemark, in southern Norway (Hansen). The darker schist is believed to emanate out of the Scandinavian Caledonian Zone although no quarries have yet been discovered (Hansen). However, the likeliest exporting site in the north of Norway that could have exported the darker type of schist is Borg (Hansen). This schist would have arrived in Iceland by way of Kaupang or Hedeby (Hansen). The lighter Eidsborg schist would have been acquired directly from Norway or, perhaps, through exchange at York (Hansen). In Mývatn 20.83% of the whetstones come from a Viking age context, 48.46% from the medieval period, and 19.02% from between the 9th and 15th centuries. By far, the majority of whetstones have been found at Gásir within a medieval context. The implications of this are at present unclear. It is possible that Gásir was a production site although, according to Sigrid Hansen, the material thought to represent raw schist for whetstone production is not found in significant quantities at Gásir to suggest such an activity on a large scale (Vésteinsson et al.). However, Gásir does have the potential to reveal small schist fragments in concentrated areas that would be indicative of whetstone production. Such fragments have been found, for example, through flotation at nearby Kolkuós in one of the trading booths (Vésteinsson et al.). Most of the Gásir whetstones were of the Eidsborg schist and were found within all levels of the site. Only 15% of the whetstones were still in a state where they could be used for further whetting (Vésteinsson et al.). The rest were either small pendant-sized whetstones, likely not used for actual grinding,[14] or fragments of whetstones too worn to be of any further use (Vésteinsson et al.). Indeed, all Mývatn whetstones show tell-tale signs of extensive use and unusually long lifespans, which is indicative of a lack of trade in the region.

One hundred and forty-one beads have been recovered in total in the Mývatn region. From this total, four were considered to be indigenous in nature. Of the remaining beads, three were from an unknown context and two others have an uncertain nature; one of the beads from Gásir may not be a bead, and the Möðruvellir bead may have been produced domestically. Nevertheless, what is certain is that the majority of beads in Mývatn come from pagan burials, especially at Dalvík (Brimnes), Ytra-Garðshorn, and Björk. In comparison, only the settlement site of Hofstaðir has revealed a similarly large quantity of beads, all from a Viking age context. The excavated beads come from a variety of foreign origins and would have arrived in Iceland by way of trade between continental Europeans and Scandinavians. For Mývatn Icelanders, the trade of beads would have likely been facilitated by intermediary Norwegian handlers. Some beads may have even come from farther afield, originating out of the Far East, and would have

eventually made their way westward through a variety of European and Scandinavian nodal points. According to Elín Hreiðarsdóttir, beads seem to be particularly connected to Birka, Kaupang, and Hedeby, and may have entered Iceland via trade routes that traversed one or all of those major trading sites.

For this article I define major weapons as being spears, swords, and axes. For statistical purposes I have also combined the iron fragments from the Dalvík (Böggvisstaðir) and Laufás pagan burials, which were thought to be fragments of a sword, into simply one sword for each kuml, rather than counting them as four or more sword fragments from potentially four or more different swords, which would be an illogical conclusion for a single grave. Therefore, we can say that twenty-eight major weapons have been found in Mývatn overall. All of the major weapons were found within a Viking age context and all were found in pagan graves, with the exception of Naust, which contained a spearhead that may have been domestically manufactured. Although the majority of the finds were undiagnostic, the vast majority of diagnostic weapons came from Norway and were ostensibly brought to Iceland during the settlement process:

	Major weapons	Percentage of overall
Norwegian provenance	13	35.14%
Swedish provenance	2	5.41%
Unknown provenance	22	59.46%

Table 3: The provenance of major weapons recovered from the Mývatn region

One hundred and forty-nine pottery sherds have been found in the Mývatn region in total, of which two were undatable. Once again, the vast majority of pottery sherds come from medieval Gásir, with the next largest amount coming from nearby Möðruvellir. This would seem to indicate that the majority of pottery came to Mývatn during the Middle Ages by way of the trading site at Gásir. Some of the pottery found at Gásir was 13th to 14th century stoneware that originated in Siegburg and Lower Saxony, likely brought to Mývatn by Hanseatic trading ships. Some of the 13th to 15th century earthenware found at Gásir would have originated from southern Scandinavia, northern Germany, eastern England, the Netherlands, and northern Europe. This strongly suggests more Hanseatic and English trading, although intermediary handlers may have been involved in the exchange as well.

Only five coins or coin fragments have been found in the Mývatn region from the time periods outlined for this research. Of those five, three came from pagan burials, one from Viking age Hofstaðir, and one from medieval Gásir. Only one of the coins was diagnostic, originating in England and identified with the reign of King Æthelstan in the 10th century. The King Æthelstan coin was found in the pagan burial at Möðruvellir. Although coins are known to have been used

in Iceland, the small sample of finds from Mývatn do little to shed any new light on the matter.

Conclusion

Empirical research in Mývatn seems to consolidate much of what has been theorized about early Iceland; namely, that trade was conducted mainly with Norway and that Mývatn was largely a region onto itself. Foreign trade does appear to be primarily associated with Norway until the medieval period and early archaeological indications from this article reveal that the original settlers either brought things with them to Iceland from Norway during the settlement process or that they had tentative contacts in Norway with whom they exchanged during the Viking age. Relationships with Norway appear to become strained as time wears on though, and Mývatners largely had to make due with what materials they had at hand. This is primarily evidenced by the unusually long lifespans of whetstones found in Mývatn and by the region's tendency to rework used soapstone. Such hardships experienced by the Viking age Mývatners were surely a consequence of their living on the fringes of the known world and one can only imagine that most other objects from abroad would have been equally traded for in low quantities and over infrequent time periods. However, the Mývatn economy would eventually be more fully integrated into western society during the Middle Ages in what would later be termed the Hanseatic and English Trading Period. This development would have provided Mývatn Icelanders with greater access to foreign markets through additional trade contacts, although their condition would largely remain as an economic landscape on the periphery.

Acknowledgements

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NOTES

1. For example, some crosses have been found etched in caves in southern Iceland that have been attributed to these so-called 'Papar.' Papey Island off the east coast of Iceland is one such place name that would seem to indicate the presence of such Irish monks.
2. Tephra dating confirms this.
3. Roughly six decades.
4. 2000 to 2004.
5. Two of the five.

6. Likely at least three phases.
7. Table 5.
8. Based on the early ratio of caprine to cattle bones.
9. For example, pottery sherds are not mentioned in the *kumls* table because, to date, pottery sherds have yet to be found in a pagan burial in the Mývatn region.
10. See the Kumls table (table 1) for more detail.
11. See tables 4 through 6 in the appendix for more detail.
12. One possible exception here is the pagan burial of Hrísar, where a spindle whorl made out of "stone" was found. Presumably the stone was soapstone although the reports were not specific.
13. See table 5 in the appendix for more detail.
14. Another possibility is that they were used for sharpening tiny objects such as needles or small scissors.

APPENDIX

Viking age sites	Flint	Steatite	Coins	Whet-stones	Beads	Weapons
Hofstaðir	29.03%	17.24%	20.00%	7.98%	19.71%	
Hrísheimar	16.13%	10.34%		4.91%	6.57%	
Naust				0.61%		3.57%
Skútustaðir	3.23%			2.45%		
Sveigakot					2.19%	

Table 4: Viking age settlement sites and the percentage of each artifact from the overall amount of that artifact found in the Mývatn region, that has been found at each site

Mixed context sites	Flint	Steatite	Whet-stones	Beads	Sherds
Höfðagerði at Núpar					1.34%
Hrísheimar		3.45%		0.73%	0.67%
Skútustaðir	9.68%	6.90%	5.52%	2.16%	2.68%
Steinbogi			1.23%		
Sveigakot		44.83%	12.27%	2.92%	3.36%

Table 5: Settlement sites from a mixed Viking age and Medieval context, and the percentage of each artifact from the overall amount of that artifact found in the Mývatn region, that has been found at each site

Medieval sites	Flint	Steatite	Coins	Whet-stones	Beads	Sherds
Möðruvellir				0.61%	0.73%	9.40%
Ingiríðarstaðir				0.61%		
Gásir	22.58%	6.90%	20.00%	42.94%	0.73%	81.21%
Höfðagerði at Núpar		6.90%		1.23%	1.46%	
Skútustaðir				3.07%		

Table 6: Medieval settlement sites and the percentage of each artifact from the overall amount of that artifact found in the Mývatn region, that has been found at each site

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