Two Days in Víðidalur: Rapid Survey of an Abandoned Valley in Iceland

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Cover Photograph: Douglas Bolender coring at Þverá, an abandoned farm in Víðidalur. Behind him and beyond the scree slopes on the east bank of the river is the site of the abandoned farm Hrafnagil. On the west bank at left, the Gvendarstaðir homefield lies in a grassy area at the mountain's base. Beyond Gvendarstaðir are the scree slopes of Kambar. Photo: Kathryn Catlin.

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Víðidalur is an abandoned valley in Iceland with remnants of settlement dating to the late 19th century and earlier. We conducted a rapid coring survey over two days in 2014, allowing us to sketch a preliminary environmental and settlement history of the region. The survey revealed an environmentally dynamic landscape with a history of periodic occupation and abandonment, demonstrating the potential contribution of rapid coring survey as a method in difficult-to-access regions.

Remote highland valleys have been a subject of archaeological investigation in Iceland since the 19th century. Much of this work has focused on surface survey of abandoned farms. Common explanations for highland abandonment include outbreaks of the Black Death during the 15th century and periods of environmental degradation, but only a few regions have been systematically investigated (e.g., Dugmore et al. 2007, Júlíusson 2021, Rafnsson 1990, Sveinbjarnardóttir 1992, Vésteinsson et al. 2014, Zoëga 2007).

Image 1. Víðidalur looking north from Þúfnavellir. Víðidalur today is both remote and uninhabited. The meandering river has scoured the entire valley bottom between mountains. In the foreground is a combination of riverine and fluvial erosion deposits as well as cryoturbated frost heaves, and farther north in the midground clear erosion fronts are visible. The valley is not accessible to most vehicles and is used recreationally by hikers, horseback riders, and foxhunters. It also provides summer grazing for sheep and horses. In winter, it is often under thick snow cover. Luckily for us, the weather was warm and sunny for the entire trip. Photo: Douglas Bolender.

Víðidalur, a remote highland valley in North Iceland, has been environmentally dynamic throughout its history (Image 1). Steep mountains show evidence of landslides, while flooding and the meandering river have caused significant erosion. Despite these hardships, Víðidalur was settled early in Iceland's history and was farmed sporadically through the 19th century. All farms are now abandoned. The ruins present a range of preservation conditions and assessment challenges, including landslides, erosion, cryoturbation, alluvial deposition, and wetland formation. Archaeological features in Víðidalur include ruined buildings and walls around former homefields (intensified fields around farmhouses where hay was cultivated).

Víðidalur today is only accessible on foot, horseback, or robust all-terrain vehicles. However, before the construction of the 20th century road system, Víðidalur was a well-traveled summertime route between lowland valleys in North Iceland.

Iceland was not settled until late in the 9th century CE, and most farms in Víðidalur were abandoned sometime later in the medieval period. By the 16th century, when the farms first appear in historical documents, they were described as abandoned. Some of the farms were periodically resettled during the 17th through 19th centuries, though the primary use of the region during this time appears to have been communal pasture. Guided by these historical records, several historians surveyed and described the ruins in the 20th century (DI IV 1897: 700–702, DI IX 1909–1913, Helgason 1969, Jónsson 1924–1927, 1925–1926, Konráðsson 1954: 54, Magnússon and Vídalín 1926: 400–401, 1930: 73–74, Pálsson 2001, Sigurðsson 2012). Nonetheless, most of the occupational history and reasons for abandonment remain obscure.

During the summer of 2014, we set out on a two-day survey of Víðidalur (Images 2 and 3) to assess the viability of a potential doctoral project focused on the settlement history of environmentally marginal regions. Our survey demonstrated both the logistical hurdles of a full-scale project and the value of a limited intervention survey (Catlin and Bolender 2018). The survey relied heavily on soil coring, a methodology that is particularly useful for inaccessible regions. A small team with a core can learn significant new information in a short time.

We collected data from a total of 120 cores. Coring allows us to readily identify buried sediment sequences of both cultural and environmental origin. Cultural layers include ash middens, structural turf (building material made of wetland roots), and domestic floors. Environmental layers include sand and gravel that indicate flooding and landslides, natural peat growth and inundated soils that denote wetland formation, and truncated soil sequences or impenetrable gravel layers that indicate fluvial changes and erosion. The value of coring in Iceland is significantly aided by tephrochronology (dating based on volcanic ash layers in stratigraphic sequences).

Overall, our survey points to Viking Age (9th–11th century) settlement at two sites, and some habitation in the 12th and 13th centuries, followed by a long abandonment with sporadic resettlement in the 17th–19th centuries. These settlement phases occurred in an extremely dynamic environment. The coring data variously shows wet, deep soils; peat growth on top of sand; alternating lenses of sand and gravel; or shallow soils above gravel. Across the valley and throughout its history, landslides and floods have alternated with slower sediment deposition and the formation of mires. The many locations where we observed an 18th century tephra in the soil above impenetrable gravel suggest earlier cataclysmic events in parts of the valley, which either scoured away or completely buried earlier deposits. While we cannot decisively connect the abandonment of any settlement to a specific event, clearly farming in Víðidalur would have been challenging.

We began the survey by driving a truck to the end of the track at Gautsdalur, one of few currently active farms in a neighboring valley. Our route took us past several abandoned farms. The first farm we investigated was Móbergssel, situated beside a high mountain lake just west

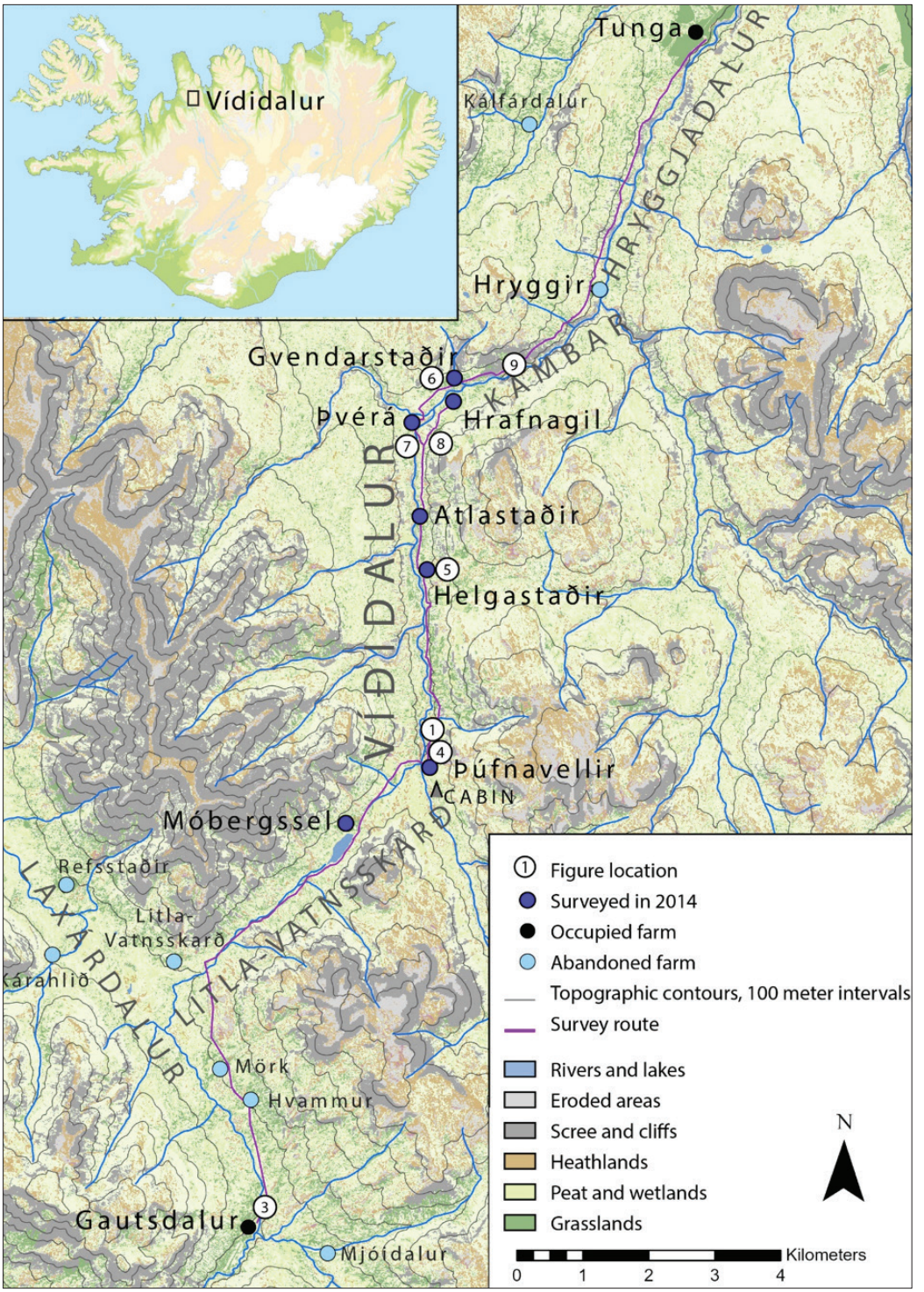

Image 2. Map of the survey region, including all surveyed farms, locations of photographs, and our route. We covered about 24 km in around 36 hours on 22 and 23 July 2014, starting at the farm Gautsdalur in Laxárdalur (the closest access point for a vehicle) and ending the next evening just north of the farm Tunga. The hike included portions of 5 valleys (Laxárdalur, Litla-Vatnsskarð, Víðidalur, Kambar, and Hryggjadalur), but we focused our attention on 7 named sites in Viðidalur and the closest valleys to its north and south. Map: Douglas Bolender.

of the pass to Víðidalur. Móbergssel was last occupied in 1895 and had been a farm and shieling through the 18th and 19th centuries. Our survey showed evidence of this 19th century occupation, but earlier sediments were obscured by a layer of impenetrable gravel, representing significant erosion, landslides, and/or lacustrine changes prior to the late 18th century.

Late on the first evening we arrived in Víðidalur and stayed the night at a small hiker's cabin near Þúfnavellir, the southernmost ruin in the valley (Image 4). According to available records, a farmer named Ólafur Þorlákssson briefly occupied the farm as well as the neighboring Helgastaðir in the late 17th century (Magnússon and Vídalín 1930: 73–74, Pálsson 2001: 167–168). The site had previously been described as abandoned. During our survey, parts of the ruins were visible, including remnants of a homefield wall, but the site was heavily cryoturbated and the homefield had been bisected by the development of a now-dry streambed. In the cores, we saw limited evidence of medieval occupation both before and after 1300. The visible ruins could not be definitively dated.

The next farm to the north, Helgastaðir, has distinct surface features including a homefield wall remnant and several ruined buildings, but a previous river meander has clearly removed a significant portion of the site (Image 5). Little is known about its history aside from Ólafur's brief occupation in the late 17th century. Oral tradition describes a medieval church and human bones eroding out of the bank (Jónsson 1924–1927). We found no evidence of a churchyard and it may have entirely eroded over the last century. Coring in the buildings indicated 12th–13th-century habitation with a suggestion of occupation before 1100. We could identify no clear evidence of 17th-century settlement.

Image 3. An enthusiastic Kathryn Catlin at the beginning of the survey, carrying a core, with Laxárdalur in the background. Note the evident differences in vegetation and hydrology between Laxárdalur (where a few farms still operate) and Víðidalur (Image 1). Photo: Douglas Bolender.

Image 4. A: Þúfnafellir looking south. In the foreground, a dry streambed cuts through the homefield, crossed by a sheep trail. We were able to follow sheep trails through much of our survey. The homefield wall is just barely visible in the middle distance. From this perspective, most of the ruins are indistinguishable due to deep cryoturbation. The hiking cabin is visible in the midground beyond the homefield. Photo: Douglas Bolender. B: Sheep grazing by the river west of Þúfnavellir. Sheep and the river are both an active source of erosion and have been for centuries, probably since the 10th century or earlier. Historically, the region has been used as *afréttir* (communal pasture) for farmers in Skagafjörður. Photo: Kathryn Catlin.

Oral histories and 20th century surveys describe a farm called Atlastaðir north of Helgastaðir. At the location associated with the place-name, we found only an old meander of the river and a heavily eroded floodplain. Cores here revealed soils dating to roughly the last 300 years, atop impenetrable gravel. Any habitation that may have been at this location was either buried beneath gravel or scoured away by the river.

Shortly after mid-day we arrived at the north end of Víðidalur, where two rivers join to flow to the northeast. Each bank of the confluence holds a ruined farm: Hrafnagil to the east, Þverá to the southwest, and Gvendarstaðir to the north. Hrafnagil, like Atlastaðir, is only mentioned in oral histories and 20th/21st century surveys. The way to Hrafnagil was over a treacherous scree slope. Only one of us (Bolender) made the journey, taking just a core and notebook. To all appearances, the site was a farm with a homefield wall and building ruins, but the field had become a wetland with well-developed vegetation. The soil was so deeply saturated that coring failed to extract soil even in the visible ruins (Image 6).

After pausing for lunch (Image 7), we continued to Þverá, a ruin on a tongue of cryoturbated heathland between rivers (see cover photo). All records of the site describe it as abandoned. We observed at least one ruined building, which provided clear evidence of 10th century domestic habitation. We saw no sign of later settlement, despite good preservation compared to other sites in the survey.

The final farm we visited was Gvendarstaðir, across the river from Hrafnagil (Image 8). Histories indicate medieval abandonment with re-settlement in the 18th and 19th centuries. The last farmers departed in 1898 after previously residing at Móbergssel. The homefield boundary and farm buildings of this modern occupation are readily visible. Many farms in Iceland have a long continuity of farmhouse location, but at Gvendarstaðir the oldest ruins were far downslope from the modern buildings. Coring revealed a 10th century domestic building at the edge of the cliff face above the river. Like Helgastaðir, some oral histories suggest a medieval church may have been present, but also like Helgastaðir, any evidence has eroded away. We were lucky to locate this site before it disappeared, and it is possible that other sites may have already been lost to the river.

Image 5. Helgastaðir looking west. Helgastaðir is one of the best-preserved sites that we surveyed. Building ruins in the homefield are evident in person, but are difficult to distinguish from cryoturbation in the photograph. A remnant of the homefield wall is visible in the foreground as a darker green, curved line running left to right. Erosion from a previous river meander cuts through the middle of the image with an old oxbow visible in the top right. Two ruined buildings are truncated by the cliff edge in the midground. At far right, Kathryn Catlin walks north away from a cleared profile. Photo: Douglas Bolender.

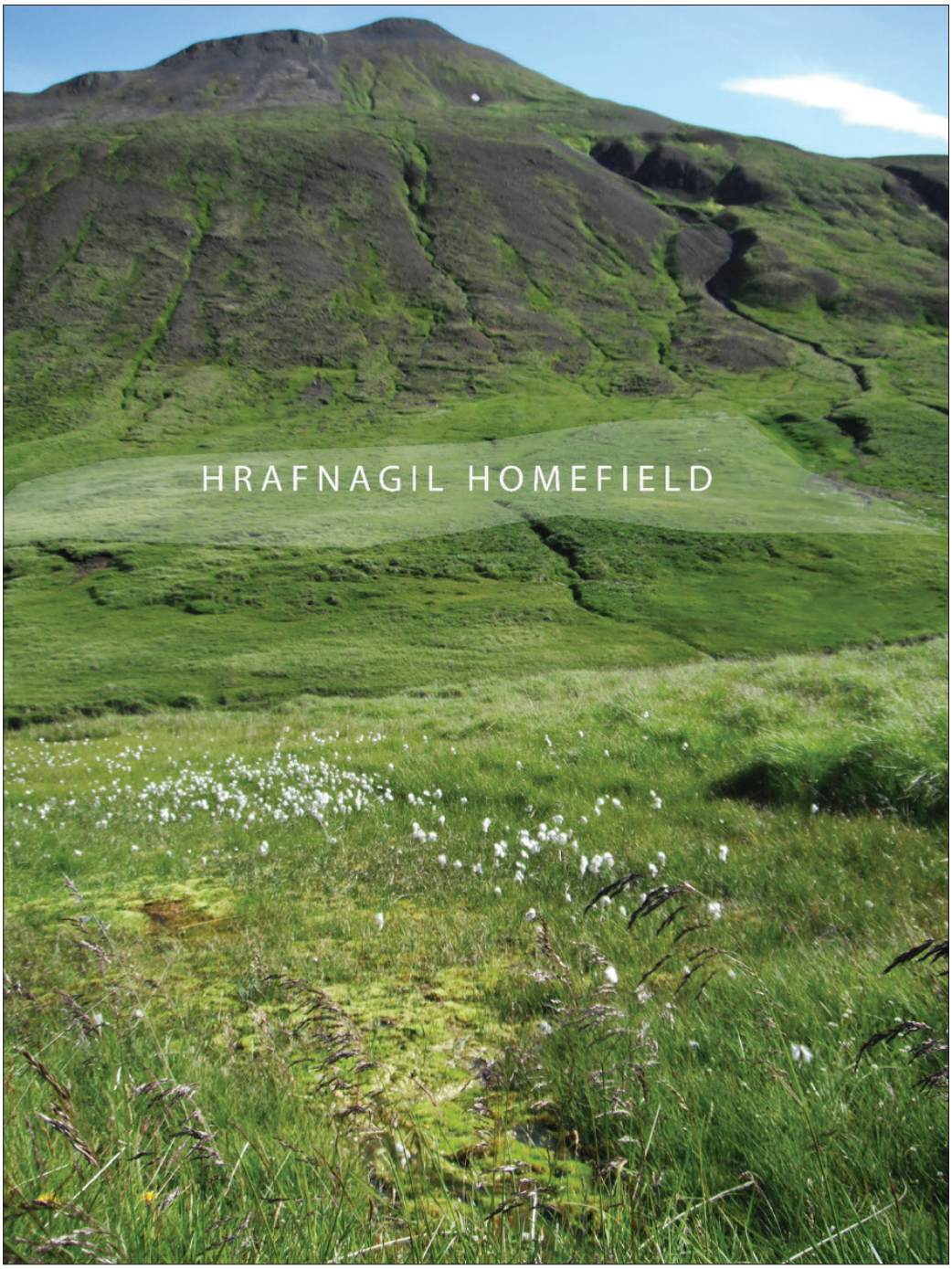

Image 6. Hrafnagil, looking south from a vantage point near Gvendarstaðir. The wetland ecology and vegetation visible in the foreground are similar to the heavily saturated, well-developed wetland that characterized the entire field at Hrafnagil. Photo: Kathryn Catlin.

Image 7. After wading through the icy river, we paused for a tea and lunch break before heading to Þverá. Note the wet socks and boots in the middle ground. A full day of hiking makes a simple snack very tasty! Photos: Douglas Bolender.

Image 8. Gvendarstaðir, view facing north from just south of Hrafnagil. The rectilinear 19th century homefield wall is visible in the background as a line through the lighter green grassland at the base of the mountain on the north bank of the river. The south wall of the homefield is missing due to movement of the river. An area of active erosion through the homefield is visible in the center of the photo, close to the 10th century domestic building. In the middle ground, Douglas Bolender returns over the eroded slope at right after visiting Hrafnagil. Photo: Kathryn Catlin.

The long walk out of Víðidalur passes through precipitous scree slopes in Kambar (Image 9), the ruined farm Hryggir, and finally the active farm Tunga, where we were met by friends around 10 o'clock (shortly before sunset).

Rapid coring survey is an inexpensive method that can provide valuable, if preliminary, detail about the environmental and settlement history of remote regions where comprehensive investigation is not immediately feasible. Of course, rapid survey cannot substitute for intensive archaeological fieldwork. Indeed, our recent work in lowland regions has demonstrated that systematic, time-intensive survey and excavation are critical to identify small and short-term dwelling sites (Catlin 2021). Our coring survey certainly missed some evidence of habitation in Víðidalur, including historically documented short occupation phases. Nonetheless, we revealed critical, previously unknown details about the environmental and settlement history of the valley:

1) People lived in Víðidalur in the 10th–11th centuries, and at least one phase of abandonment likely occurred before the 15th-century plagues that are frequently invoked as explanations for abandonment. Site abandonment is a complex process that requires attention to multiple intersecting social and ecological factors.
2) Multiple hydrological events have altered Víðidalur's landscape through the centuries.
3) Land degradation is a complex and site-specific process.
4) Some evidence of early settlement was likely either removed by erosion or buried by

Image 9. An exhausted Douglas Bolender traversing Kambar with a core, still seven kilometers south of our extraction point. The path north out of Víðidalur leads through the steep and occasionally harrowing Kambar, then past another abandoned farm at Hryggir and finally to the currently operating farm Tunga near the modern road. One hopes it was easier to navigate in the past. Photo: Kathryn Catlin.

landslides, rendering it absent or inaccessible. Justifiably, considerable recent attention has focused on the loss of coastal sites to erosion, but riverine and highland erosion is also a major risk to inland sites.

Today, Víðidalur is only accessed for pasturage and recreation. From the vantage point of the present, abandonment of remote and degraded landscapes may seem inevitable. However, to those who farmed in the valley, the region was a viable agricultural and social space. Many of the farms have long (if discontinuous) histories of occupation spanning centuries with complex reasons for abandonment. Coring has provided a glimpse into social and ecological worlds that we are only beginning to understand.

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