

Navigating the Highlands: Empowering sustainable tourism with digital signage

Goal

Provide a reliable, official source of GPS-based trail information for visitors in remote highland areas, improving safety and decision-making in challenging terrain while supporting responsible use of the landscape.

Impact

- **4,140 trail visitors accessed on-trail digital information** using the collaborative QR codes printed on signage in 2025
- Improved trail experience via **data-informed trail managers who identified** peak usage times, high-traffic choke points, and visitor sentiment with reviews
- Visitors viewed updated trail information nearly 180,000 times between June and September 2025, **increasing trail detail visibility over the summer months** 15% YoY in Fjallabak Nature Reserve and 87% YoY in the Kerlingarfjöll area

For years, our rangers had accurate GPS trail data, but no reliable way to share it beyond emailing files on request. AllTrails QR codes and new trail guide posts now give us a trusted way to provide clear, official, up-to-date information to hikers in the remote highlands.

Daníel Freyr Sigurbjargarson, Site Manager, Nature Conservation Agency of Iceland

Background

The Nature Conservation Agency of Iceland is responsible for protecting and managing Iceland's most iconic protected areas. As Iceland has become a premier (and popular) travel destination, the agency has managed an influx of international tourists in the past few years, who often arrive with varying levels of awareness of the local environment's fragility.

Challenge

Tourism began accelerating across Iceland around 2010, leading to significant investments in infrastructure and trail systems. While these investments improved conservation outcomes, the landscapes remained remote, highlighting the need for modern, accessible tools that are easily adopted by travelers from around the world and help hikers of all abilities travel safely. Providing a trusted, easy-to-use source of official trail information became a key need for improving safety and communication in these remote regions.

Approach

The agency partnered with the AllTrails Public Lands Program to develop updated resources for visitors, build a digital trail footprint, and implement safer, more responsible, and more enjoyable visitation. With over 95 million members globally, AllTrails leveraged its reach to offer millions of potential visitors a seamless, multilingual digital experience. As the most popular app for outdoor tourism, it ensured they were equipped with official, reliable safety alerts and difficulty ratings before hitting the trails. In partnership with AllTrails, the Nature Conservation Agency of Iceland implemented:

- **On-Site Integration:** Installed physical signage featuring AllTrails QR codes at high-traffic trailheads. These codes instantly link visitors to verified trail maps, safety information, and trail alerts, preventing wayfinding fatigue and keeping hikers on designated routes

- Digital Stewardship: Official routes on the AllTrails platform were verified to ensure visitors receive accurate, up-to-date, and official trail information for these remote areas
- Insights & Analytics: Monitored visitor behavior through the Public Lands Program's Data Dashboard to understand the visitation patterns of thousands of hikers throughout the 2025 season

Outcome

The partnership transformed how the Agency interacts with the modern traveler in Fjallabak and Kerlingarfjöll. By providing a reliable digital guidebook, they successfully balanced high-volume tourism with ecological preservation.

Proactively updating trail pages and providing on-the-ground signage helped thousands of visitors find up-to-date trail information:

- AllTrails helped bridge the information gap for international visitors. Both local and international visitors were provided a seamless, multi-language digital experience, both while researching and while on trail, ensuring they were equipped with safety alerts and difficulty ratings before hitting the trails
- By placing AllTrails QR codes at major trailheads in Landmannalaugar and Kerlingarfjöll, visitors were given direct access to free, accurate trail information. This provides reliable GPS-based guidance in remote areas and aligns digital trail data with a new network of on-site trail guide posts

Rangers gained a free, reliable tool to help hikers find accurate, up-to-date information to help modernize their experience on the trails