

Tourists visiting Þórsmörk lack knowledge and awareness of Katla and jökulhlaup hazard

Deanne Bird^{1,2}, Guðrún Gísladóttir¹ and Dale Dominey-Howes³



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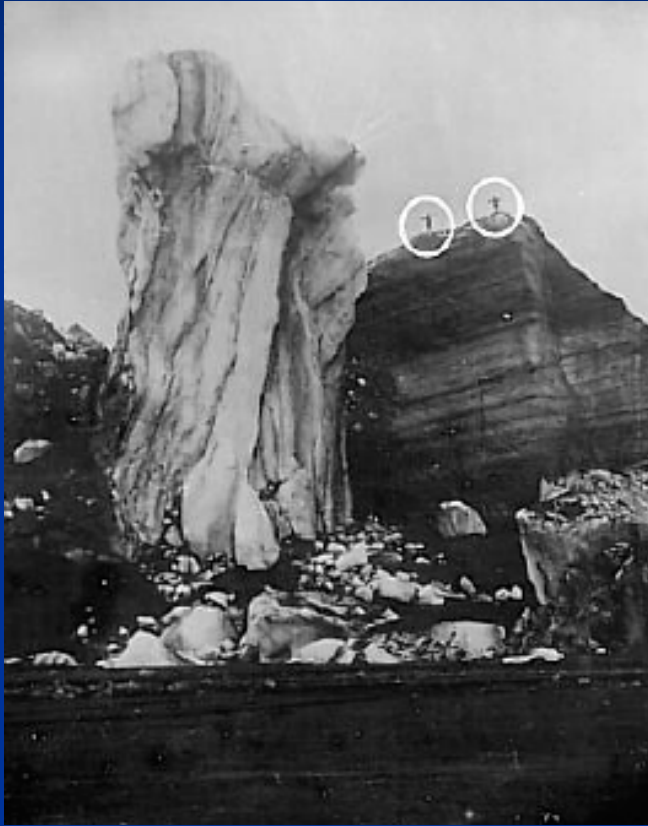
1 Department of Geography and Tourism and Earth Science Institute, University of Iceland, Iceland

2 Department of Physical Geography, Macquarie University, Australia

3 Risk Management Group, University of New South Wales, Australia



The 1918 Katlahlaup is the largest historical volcanically induced flood



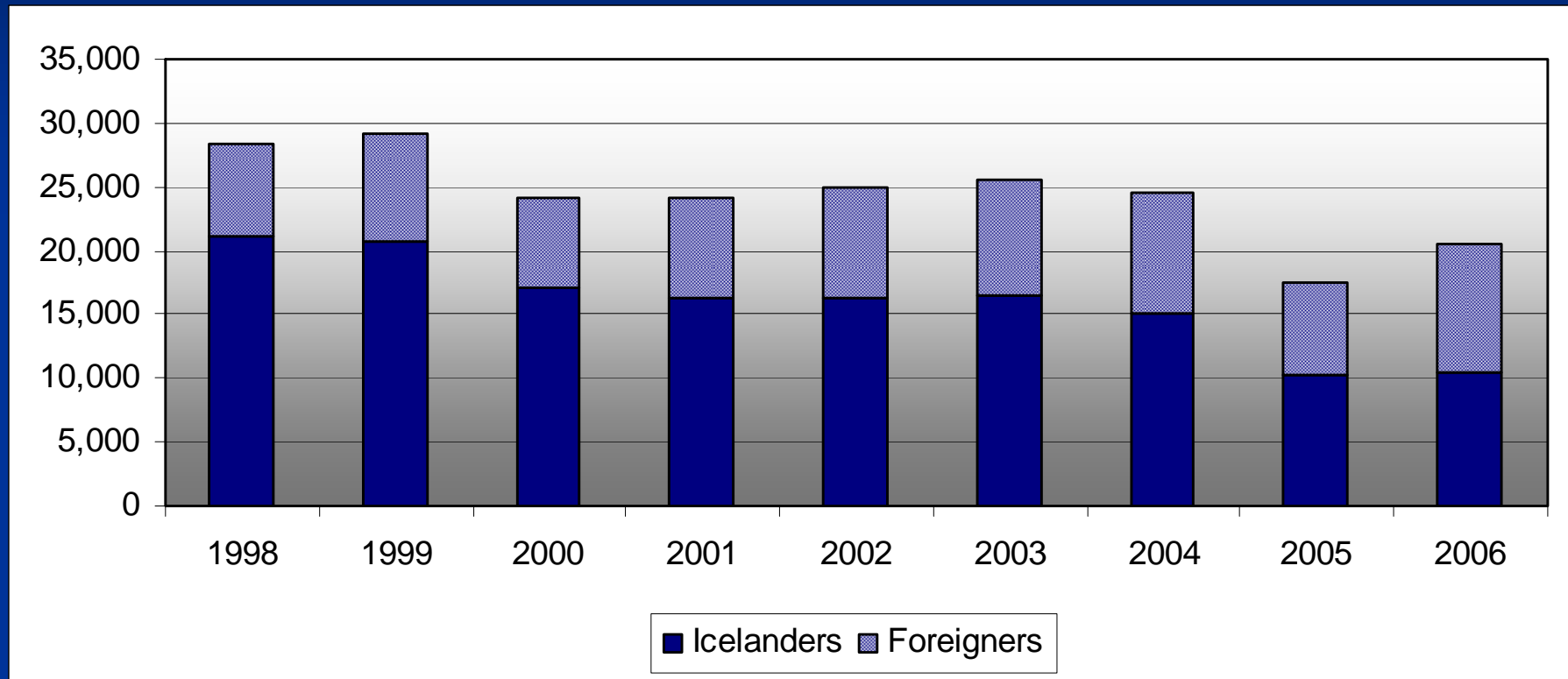
Ice blocks from the 1918 Katla jökulhlaup. Original photo taken by Ljósm K. Guðmundsson 17/11/1918

- At least 10 volcanically induced jökulhlaup on the Markarfljót
- Increased seismicity in the western region of the Katla caldera
- Last Katla eruption in 1918
- Katla erupts 1-3 times per Century

Possible flood areas from a Katlahlaup and emergency information



Total number of overnight stays in Þórsmörk



- The total number of overnight stays in 2006 > 20,000
- Which consisted of 10,398 Icelanders and 10,188 foreigners

Public response to an evacuation is partly dependent upon their knowledge and awareness

- The aim of this investigation is to assess tourist's knowledge and awareness of Katla and jökulhlaup



hazards

- Make recommendations for improving hazard communication and education strategies

The questionnaire survey instrument

– a popular tool to gain social data on natural hazards

- Face-to-face questionnaire survey interviews were conducted with 116 tourists during summer 2007
- Questions collected data on participant:
 - Classification
 - Knowledge
 - Awareness
 - Perception
 - Preparedness



Key Characteristics of Participants

Distribution of participants by age		18 < 30 yrs 36%	31 < 50 yrs 36%	51+ yrs 28%		
Percentage of Icelandic and international participants		Icelandic 23%		International 77%		
Percentage of participants that have achieved the following level of education:						
Educated from 6 to 16 years 1.7%	High school 16 to 20 years 7.8%	Special Education 13.8%	Under-graduate 11.2%	University degree 38.8%	Postgraduate qualification 25.9%	Other (Un-completed higher education) 0.9%

Participant responses to specific questions

How long will you spending in the region? <ul style="list-style-type: none"> • Icelandic tourist • International tourist 	1 day 15% 6%	2 + days 85% 94%
What is your main purpose for visiting this region? <ul style="list-style-type: none"> • Icelandic tourist • International tourist 	Hiking 37% 62%	Other 63% 38%
Are you travelling with a guide whilst in this region? <ul style="list-style-type: none"> • Icelandic tourist • International tourist 	Yes 7% 9%	No 93% 91%
Do you have your GSM with you whilst in this region? <ul style="list-style-type: none"> • Icelandic tourist • International tourist 	Yes 89% 65%	No 11% 35%
Do you carry a satellite phone with you when travelling in this region? <ul style="list-style-type: none"> • Icelandic tourist • International tourist 	Yes 22% 10%	No 78% 90%

Significant Findings

- Only half the international tourists are aware of Katla
- Both Icelandic and international tourists lack knowledge of Katla
- Majority of international tourists are unaware of jökulhlaup



Significant Findings

- Nearly all participants are unaware of emergency procedures



- Participants would rely on hut wardens for hazard information

Hazard communication and education is essential in Þórsmörk

- Proposed hazard communication and education campaigns should help to improve hazard knowledge and awareness amongst tourists in Þórsmörk
- Important to provide hazard training and education for hut wardens in Þórsmörk



Hazard communication/education ***DOES NOT EQUAL***

knowledge, awareness and preparedness

- In 2008, conduct follow-up surveys to determine the effectiveness of hazard information brochures and signs
 - Has knowledge and awareness of Katla and jökulhlaup hazards increased?
 - Has this knowledge transferred into hazard preparedness?

thank you!