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> Höfn, miðvikudagur, 25. júní 2025 202506-0124/C.E.J.B. 10.01.01

Subject: Application for a research permit - Northumbria University, Richard Parsons - Breiðamerkurjökull, Hoffellsjökull, Heinabergsjökull, Fláajökull

The Nature Conservation Agency of Iceland has received an application from Richard Parsons, on behalf of Northumbria University, dated 24.6.2025, for a permit to conduct research within Vatnajökull National Park. Northumbria University has researched the area each year since their first permit was granted in 2022 as part of a large ongoing research project. The applicant requests a renewal of their research permit for 2025.

Vatnajökull National Park is protected according to act no. 60/2007.

According to art. 14, it is prohibited to cause damage or disturbance to the wildlife, geological formations, landscape, and cultural heritage sites within Vatnajökull National Park.

According to art. 31 in the Nature Conservation Act no. 60/2013 it is prohibited to drive off road in Iceland.

Description of the project:

Project name: Drone Observations of Glacier Calving Fronts

Date, timeline and duration of the project: 25th - 29th August 2025

Location inside Vatnajökull National Park: Breiðamerkurjökull, Hoffellsjökull, Fláajökull and Heinabergsjökull. Locations of interest consider ease of accessibility from established roads.

Description of the project, purpose and execution:

Last year, members from the Northumbria University research team conducted drone observations of the Breiðamerkurjökull calving front under the research permit case number 2405047. We would like to continue our observations using the same location and approach as before and we request a renewed research permit for this purpose. The general scope of the



project is to observe calving processes and to use those observations to further our understanding of the fracture processes. This is an observational part of a large research project at Northumbria University (https://www.northumbria.ac.uk/research/1/our-peaks-of-excellence/future-of-ice-on-earth/) focusing on modelling and validation of ice-flow models. We are interested in documenting and quantifying changes in calving front location and ice-cliff heights.

Description of methods for sample taking, if part of the research:

The observational surveys will be carried out using a drone. We do not intend to put up a camp and will be travelling to the site each day. Travel to the sites of interest involves driving along established roads in the national parks, followed by a short hike.

Other information that the applicant wants to submit:

Whilst working on this project in previous years the Northumbria University research group has not encountered other travellers or nesting birds at the sites of interest.

Impact assessment:

The Nature Conservation Agency of Iceland considers the project *Drone Observations of Glacier Calving Fronts* likely to have an overall positive impact on the conservation value of the area through improved understanding of the behaviour of ice-flows.

Conclusions and conditions:

The Nature Conservation Agency of Iceland hereby grants Northumbria University permission on its behalf to conduct research within Vatnajökull National Park as described above on 25th – 29th August 2025 on the following conditions:

- Keep this letter with you on site during the project. The permit conditions should be introduced to the staff of the project before work begins.
- The applicant shall inform rangers in the area about their arrival and departure. This is to be done 24 hours before entering the area and again before leaving it. The best way to do this is to 'reply-all' to the email that this permit was sent with. The rangers can also be contacted by phone on the number supplied in the email this permit was sent with.
- If the project dates or description changes the Nature Conservation Agency shall be notified as soon as possible.
- When it is necessary to go off-path, extra care must be taken not to cause damage to terrain, including vegetation, soil and geological formation. All traces of activity must be removed afterwards.
- If any complications occur during the project, please contact the rangers at Jökulsárlón or the Nature Conservation Agency of Iceland, tel. +354 556 6800.



- This permit is only valid for research purposes. It does not include a permit to utilize the footage or samples for commercial purposes. The footage cannot be signed over to a third party for commercial use.
- If the material is meant for public viewing it must be noted in the publication that a permission from Vatnajökull National Park was obtained for the project.
- All vehicles used during field exploration must be labelled with the identity of the researcher's institute. During field work, all participants in the project must wear clothing labelled with the identity of the researcher or the research institute. High-visibility clothing is preferred.

About drones

- The applicant should be conscious of other guests on the sites and make sure that the droneflight causes as little disturbance as possible to other visitors.
- An unmanned aircraft should never be flown in close proximity to people. Please take precaution not to disturb people's experience, their safety or personal privacy nor the general peace of the protected areas being filmed.
- The National Park requests that, as far as possible, flight time be avoided during the area's busiest times of the day.
- If the use of unmanned aircraft causes disturbance to wildlife in the area, its use should be ceased at once.
- The conductor of the unmanned aircraft is responsible for the aircraft within the protected area. This includes taking responsibility of any possible risk of harm to people, fauna and nature and leaving no permanent marks on the site in question. Should the aircraft crash, all components from it must be collected and removed from the area.
- For safety reasons, the pilot of an unmanned aerial vehicle must wear marked clothing so that the person can be identified.
- If falcons or eagles are seen in the area, it is not allowed to fly the drone there.

Site-specific conditions

- Hoffellsjökull note that the glacier is within the boundary of the National Park, but the surrounding land is not. The applicant may need permission from the landowner for this project.
- Breiðamerkurjökull and Heinabergsjökull note that kayak and boat tours operate on the glacier lagoons in front of these glaciers.

If the licensee causes damage to nature, according to art. 87 in the Nature Conservation Act no. 60/2013, the Nature Conservation Agency of Iceland can, according to the Nature Conservation Act, e.g. order the licensee to fix damage to nature and vegetation and/or stop the project.



The Nature Conservation Agency of Iceland can according to art. 89 in the Nature Conservation Act no. 60/2013 change conditions of the permit, add new conditions or withdraw the permit in order to prevent damage to nature if environmental conditions change.

According to art 89. in the Nature Conservation Act no. 60/2013 the Nature Conservation Agency can withdraw the permit if conditions of the permit are not complied to.

Unmanned aircraft should take off and land in a safe distance from other visitors according to regulation 1360/2024 on unmanned aircrafts.

The usage of a drone shall be according to regulation no. 1360/2024 on the operation of remotely piloted aircraft (https://www.icetra.is/aviation/drones/).

Please note that according to the regulation all drones need to be registered at the Icelandic Transport Authority. You can register them at the webpage flydrone.is

The Nature Conservation Agency of Iceland requests access to reports and scientific articles of the aforementioned studies, which could be used for educational purposes about the area and/or assist in its management, free of charge.

Best regards,

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Charli E. J. Brzeski Assistant Park Manager Vatnajökull National Park

