

Guidelines for inclusive field trips in Geology and Volcanology

IAVCEI Commission on VIPS committee, 2023

Field trips are a wonderful opportunity for learning geology and volcanology. In addition to discovering outcrops in detail, they offer opportunities to discuss science, travel the world, get to know fellow scientists, and foster collaborations. However, for many in our community, field trips can be challenging and are often a place of exclusion. The following guidelines aim to provide suggestions for those planning and leading field trips in geology and volcanology to make them more inclusive and enjoyable for all.

Whilst these guidelines are intended for use by those involved with running field trips associated with the IAVCEI Commission on Volcanic and Igneous Plumbing Systems (VIPS), we suggest they should be adopted widely in the IAVCEI community.

Inform participants

Timely provision of logistical, as well as scientific, information to participants is crucial to facilitate inclusiveness. Diminishing uncertainty in the lead-up to and during a field trip can decrease anxiety and allows participants to be well-prepared and better enjoy the field trip. Be mindful that there will likely be a wide range of experience with fieldwork and travel in your group, especially if including students or those not from a geological background, so don't make assumptions.

Provide participants, ideally a few weeks in advance, with information via a pre-trip information session and a field trip guide in a short, printable/scrollable format friendly to mobile devices. Such information should include:

1/ Logistics

- Start time and time expected to be back at the accommodation.
- The likely weather conditions.
- The gear needed by participants to protect themselves and be comfortable.
- Access to ATMs, the need for cash, or any additional expected costs.
- Availability of phone signal.
- Inform if and what kind of meals will be included, ideally adding information on portion size. If food will not be provided, inform participants of what the opportunities to buy food or eat in restaurants will be. If food will be provided, enquire about allergies and dietary requirements.

2/ Accommodation

- Accommodation details and nature (hotel, dormitory, or tents).
- Inform if the accommodation will be shared and how sharing will be organized in coordination with the participants.

3/ Health and safety

- A full risk assessment for the trip. Universities and research organisations often have their own templates which can be used.
- The level of fitness and mobility required. In case of difficult access to an outcrop, if an alternative will be proposed or if it will be possible to skip the outcrop.
- The additional health and safety gear that will be provided by the leaders.
- Information on how to contact emergency services.
- Availability of medical services and first aiders on the trip, and travel time to the nearest hospital.
- A statement referring to your anti-discriminatory policy and misconduct reporting protocol.
- A code of conduct to be signed by participants ahead of the field trip.

Plan regular toilet stops

The impossibility or the difficulty to access toilets during a field trip is a challenge for many people: for some women, non-binary, and trans persons, for those who are menstruating, and for other participants with medical conditions. It induces anxiety, can cause illness if toilet access is delayed, and increases the risk of dehydration if it leads participants to restrict their liquid intake.

On the road: Plan regular toilet stops even if it involves a detour to a petrol station, a shopping center, a coffee shop, or any other places with facilities. Inform participants in advance about planned toilet stops in the pre-field trip information itinerary and update them if any deviations from the plan occur. In nature: remind participants that they should inform someone if they need to leave the group to go to the toilet. Make sure to give them privacy, but if moving to the next outcrop, make sure they can catch up easily.

Risk assessments: mitigating strenuousness and risks

Field trips are scientific events, not a place to demonstrate one's physical abilities. Always inform participants in advance of the duration, length, and difficulty of the walk and the nature of the terrain. Also inform about inconveniences or risks posed by insects, animals, rock falls, etc.

If some outcrops are difficult to access, because they involve a strenuous walk, because of rough terrain, because of needing to cross rivers or walk on slippery rocks, or for any other reason, consider giving the participants the possibility of an easier alternative, for example splitting into two groups.

Always walk at a slow pace and do not leave anyone behind. If stopping to wait for slower participants, give them time to rest when they join the group and do not start again immediately. Have one of the organizers stay at the back to make sure nobody is left behind and gets lost. On the outcrop, do not start the explanation before everybody has joined.

Complete a risk assessment ahead of the field trip and provide a copy to the participants. In many institutions, this is now obligatory. As part of the risk assessment, make sure you are aware of the availability of medical services nearby.

In case of shared accommodation, let participants group by gender and/or affinities

Accommodation in dormitories, shared bedrooms, or shared tents can be awkward and uncomfortable, especially for a gender minority (often women). Plan the repartition of participants in rooms and tents in advance and in consultation with the participants, so that they can group by gender or affinity, or choose to require their own room (with additional costs covered by the participant).

Ask participants

Consider that the participants have different needs, some of which you may not have considered. Provide participants with a short questionnaire or an opportunity to communicate needs well ahead of time and keep this information confidential to the trip organisers. Those needs may include those related to health issues, dietary requirements, etc. Some participants may be fasting during Ramadan so try to avoid this period if possible. If you provide gear or clothes to participants, for example when visiting a quarry or mine, inquire about size in advance and include non-standard sizes.

Avoid situations that could be perceived as or are geo-colonialism

Practices in Volcanology are not immune to widespread problems with equity, diversity, and inclusivity toward local scientists during field trips (Lerner et al., 2023). Involve local people and researchers in the planning and leading of the field trip to avoid "parachute science". Always respect locals and ask for permission in advance when entering private properties. Be mindful of the potential geo-colonial past of a site and raise awareness in your group. Inform participants whether rock samples can be collected.

Have consideration for members of the LGBTQ+ community

Avoid organizing field trips in places where members of the LGBTQ+¹ community are criminalized or discriminated against. The scientific community has not always been the most welcoming to this community, so even if participants are all known to you, consider for all trips that you may have participants who are not “out” in their professional life.

Make sure that everybody feels respected

Discourage comments or jokes that are belittling to participants or members of minoritized communities. Do not tolerate any form of harassment or bullying and consider undertaking ally training. Consider also that not everyone drinks alcohol. Make sure there are enough non-alcoholic beverages available to participants. Ensure that there is no peer pressure exerted on participants regarding alcohol consumption or smoking. Your trip should include a zero-tolerance policy regarding illegal substance consumption, clearly communicated to the participants in advance.

If someone complains to you about the disrespectful behavior of another participant, take the complaint seriously and inquire if they want you to do something to rectify the problem and suggest they report it to a field trip leader.

Leadership, code of conduct and reporting

Inform your group in advance of the roles of the field trip leaders. Assign a trusted person among the field trip organizers to serve as a reporting point, this person should ideally not be the main trip leader. Include a statement referring to your institute’s anti-discriminatory policy and misconduct reporting protocol in the field trip information document so the participants are aware you expect them to abide by that policy, and that you will act accordingly. Organize an opportunity for all participants and leaders to accept and sign your code of conduct in advance. Your code of conduct should explicitly state the mechanism for reporting behaviour in violation of your code of conduct to a trusted person, and that the trip organizers reserve the right to take any appropriate measures, up and including demanding offenders leave the group immediately.

Further resources

We thank the authors who provided information that helped to compile these guidelines and who provided feedback on draft versions.

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¹ LGBTQ+ stands for *lesbian, gay, bisexual, transgender, queer (or sometimes questioning), and others*.