BETTER SCIENCE GUIDES

SAFE FIELDWORK

BRITISH ECOLOGICAL SOCIETY

Contents

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Cover image: Marie Laure Rurangwa

Introduction

Developing good practice in planning and undertaking safe inclusive fieldwork

Fieldwork is how many of us fall in love with ecology. It inspires us, and it's the fountain from which many of the best, funniest, and most shocking stories seem to flow. When we come together and talk about our careers, we talk about the wonder of the places and species we have seen, and sometimes the little accidents and mistakes that make for entertaining anecdotes.

Often, we also talk about the challenges, the things that should not have happened, the reasons why we gave up on fieldwork, and the things we need to change so that everyone who wants to undertake fieldwork can do so safely and equitably.

This guide is aimed at everyone who is involved in fieldwork, from first time field researchers to supervisors. It seeks to provide a brief introduction to planning and undertaking fieldwork, links to relevant resources, and advice from those who have been into the field themselves and learnt many things along the way. This guide does not seek to replace institutional policies and guidance for field researchers, or the relevant legal frameworks within which institutions work.

We don't pretend to have all the answers, but we do hope that this guide helps you prepare for, get the most from, and ultimately enjoy your fieldwork.

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What is fieldwork?

We think of fieldwork as the fun, inspiring bit. However, it is first and foremost the data collection period of our research. Time in the field is limited by budgets, schedules are tight, and there are long lists of tasks to complete, often in short periods of time. We assume everything will go to plan, even though this is rarely the case, and any spare time we build in is quickly absorbed. All our planning will be impacted by the unpredictable: weather, equipment failures, national and (in recent years) global factors.

When fieldwork goes well, we are rewarded with datasets which allow us to test hypotheses and think of new questions for future research. As individuals, there are things we can control when heading into the field, and there are things we have less control over. Knowing what we can and cannot control, and why, helps identify who is responsible for each aspect of fieldwork.

Part of planning for successful and equitable fieldwork requires us to acknowledge our respective responsibilities and the power imbalances within our institutions. Those with the responsibility to set institutional policies should be informed by the experiences of their field scientists and listen to those who feel excluded. For those of us working from a position of greater wealth and opportunity, we must also acknowledge the need to include local communities and researchers in ways that are mutually beneficial to those individuals. This includes those who fund international research in less affluent countries.

Planning your fieldwork

Where to start

Your supervisor/manager should provide you with information regarding your fieldwork destination and sites. Regardless of how much information you have been given about your field sites you should:

- **Check your institution's policy on fieldwork.** Institutions have different policies and they can be difficult to find. Some institutions will have specific advice around conducting fieldwork, for example, policies on lone working and travel guidance. Many institutions will also require you to apply for ethical approval if your research involves working with local communities. Ask your supervisor for your institution's relevant policies when you start your new position.
- **Research your fieldwork destination.** You'll find lots of advice online but it's best to start with your government portal. In the UK this is the **Foreign, Commonwealth & Development Office (FCDO)** as it includes essential information on:
  - Safety and security – whether it is advisable to travel
  - Entry requirements – visa and passport validity
  - Health – which vaccinations and other medication you may need, including whether you can travel with your personal medication
  - Local laws and customs – including, for example, LGBTQIA+ rights, women's rights, expectations in terms of dress code and behaviour

  However, remember that there is a difference between legal protections in a country and the local cultural norms, especially when you may be travelling to remote field sites. Talk to people who know the exact location about mitigating any potential risks.
- **Check whether you need a specific research permit or license to carry out data collection.** Regulations vary globally. Some countries have a lengthy and costly application process. Follow all guidance about the specifics on what data you can and cannot collect to avoid legal complications. If you aim to take collected samples across borders, you must follow both countries' regulations. If you can, process and deposit samples in the country where you collected the data. Organising permits, licences, and permissions can take up more time than you think so it's something to start early, ideally at least six months before you plan to travel.

Some common field scenarios to consider

- Your supervisor has done fieldwork in the country and specific field sites and can provide detailed guidance to help you to prepare for fieldwork.
- Your supervisor has done fieldwork in the country, but you will need to find new or additional field sites which they have not been to.
- Your supervisor has not carried out fieldwork in the area in which you are planning to do fieldwork. However, they have a contact in that country with whom you can liaise.
- Your supervisor has not carried out fieldwork in the area in which you are planning to do fieldwork, nor do they have associated contacts.

Essential skills for the field

What are the essential skills you will need, from data collection to day-to-day living? Identify all the tasks you will undertake and the skills you need to complete them. Often the training you require can take place at your research institute, but this might not always be the case. Where necessary, the costs and logistics of more specialised training needs to be considered. Your research design should have factored in most of the technical competencies you'll need.

You also need to consider non-technical skills that are necessary for fieldwork. Consider these at the same time as you are planning to fill any technical skill gaps you may have. In particular: can you speak enough of the local language to complete your research and travel in-country? Do you know enough about the local culture and customs? Will you be required to use hand tools or set up campsites?

It is important to acknowledge that confidence in our own skills is very personal and can change according to the context we find ourselves in – talk to colleagues who have been in similar settings. Remember that all of us find some things easier or harder depending on our circumstances and previous experience.

If you have any disabilities, now is the time to determine what mitigation or support you may need in the field. Especially consider how your disability may be affected by changes to sleep/diet or a physically demanding schedule. If you require medication, it is also worth reviewing if you need to take any prescriptions with you.

What to pack for your wellbeing

Beyond ensuring you have the right skills, you need to consider your wellbeing in a practical, physical and psychological sense. As a quick checklist, consider the following along with anything else you think you will need:

- **Water.** Standards and availability differ globally. Make sure your drinking water is safe. You can buy water purification tablets to take with you from many suppliers. Taking rehydration sachets is also advisable in many climates.
- **First aid.** Your institution should provide a suitable level of first aid training and ensure you are well equipped with a first aid kit. Accidents can occur in any place, at any time, so even if you're heading to a familiar location, all field researchers should have completed a basic first aid course. For fieldwork in more remote or technically challenging locations it may be beneficial to take additional advanced courses e.g. expedition or wilderness first aid training.

Not all standard first kits include everything you might need in a remote living environment and you may have to buy additional items, e.g tick removers. Always check what you have, what you might actually need, and add them to the kit you carry.

- **SIM card.** Get a SIM card for the country you are conducting fieldwork in. These can often be purchased at the airport on arrival. E-SIMs are also an option, but the phone signal for data may not be as reliable as using a SIM card. Having a connection to home, to family or friends, is an important lifeline and can be relatively easily planned for.
- **Travel and insurance documents, and emergency contact details.** Keep copies on you and make sure your supervisors and local contacts have a copies of this information, too.

Hygiene

Anti-dandruff shampoo is a good shower gel/soap option if you're headed to tropical regions where it's likely to be warm and damp for weeks on end (perfect conditions for skin fungus).

If you menstruate, menstrual cups are often an easier option for remote regions where shops and disposable sanitary products or facilities to wash clothing are less available.

Awareness of cultural differences

Conducting research in international settings is a valuable opportunity to broaden our scientific knowledge, and can be a transformative experience. Individuals should approach their work with cultural sensitivity, awareness, and a willingness to adapt. It is essential to research the history and cultural norms of your field site. If possible, learn a little of the local language too.

It is also vital to be aware of local expectations and to respect local customs, particularly in more conservative societies. Showing sensitivity to the cultural practices and traditions is essential. Be open-minded, respectful, and prepared to learn from the experiences of others. You may encounter situations where you are the only person from your ethnicity, sexuality, gender, or religion – if you feel your personal characteristics and identities may affect your experience whilst doing fieldwork, talk to colleagues or local contacts who you trust who have worked in similar contexts.

Deciding whether to communicate or mask identities

There are many people for whom their own identity places them at risk of legal or social persecution when in the field. If this applies to you, know you are not alone. Risk may relate to gender, sexuality, ethnicity, religious beliefs, disability, and more. For some, it may be possible to "mask" their identity while in the field. Masking, or social camouflage, involves concealing aspects of your identity or beliefs to present in a way that aligns with local social standards. It is important to acknowledge that not all identities can be masked, not all people will be comfortable masking, and masking does not guarantee that the person will not be exposed to harm. Masking itself can lead to negative mental health consequences and will impact everyone differently.

To supervisors: You are responsible for the safety and wellbeing of those you supervise. Therefore, you must be aware of the legal and cultural context of where your students/staff are working, as you may not necessarily be cognisant of each individual's circumstance or identity. For example, someone may not be open as LGBTQIA+ in the office. Supervisors should also be familiar with their institution's legal policies about sending staff to high-risk areas and what resources are available for on-site support or evacuation. Once you have this information, it is vital that you are transparent with your fieldworkers.

It is never appropriate to insist an individual should mask. Instead, make sure they are informed of the potential risks, ask how the individual wants to proceed, what they are comfortable with, what concerns they may have, and how you and the institution can best support them. Seek guidance from others if you do not feel you have the tools to properly support the individual, ensuring you maintain confidentiality.

An individual may decide they do not feel safe undertaking the fieldwork. In this situation, supervisors should provide alternative experiences that offer equally valuable opportunities for professional development and research contribution. Ultimately, designing fieldwork opportunities to be inclusive in the first instance will ensure they are accessible to more people.

To the person going on fieldwork: Every field situation and everyone's experiences are different. If your identity places you at risk of discrimination, it is important to ask yourself what you are comfortable with. This includes choosing whether or not to mask. Are you comfortable removing religious clothing or jewellery where you may be at risk of religious persecution? If you are in a same-sex relationship, are you comfortable removing LGBTQIA+ content from your social media? Do you feel you have enough information to make an informed decision? It is very important you feel you have the agency to make this decision without external pressure from your supervisors. Remember, your safety and wellbeing are always more important than fieldwork.

The best way for your institution to be able to support you is to be aware of your circumstances. However, if you are uncomfortable talking to your supervisor, consider others you may approach from within or outside the institution. It can be helpful, when safe and possible, to reach out to others who have worked in that area because there may be differences between the law and local societal norms. Ultimately, you are entitled to express that you are uncomfortable undertaking fieldwork without having to disclose personal details.

The institution also has safeguarding responsibilities and may advise that it is not safe for specific minorities to work openly in a given situation. In either circumstance, your supervisor and institution should clearly outline what alternative opportunities are available to you. If you choose to proceed, make sure you and your supervisor have a clear risk management strategy to ensure you have a safe, successful and enjoyable field experience.

Everyone in the field has a responsibility to be aware of the risks of discrimination within their teams. In general, you can be a supportive ally by advocating for better inclusivity in fieldwork on institutional feedback forms, meetings, and during fieldwork design. Do not "out" colleagues, even if well-intentioned. If your colleague is masking their identity, respect their choice to do so – you may not have all the information to understand the reasons and risks behind their decision.

Who is responsible for what?

Responsibility for an individual's safety in the field can be ambiguous, especially when the research is being conducted across multiple institutions. Make sure you know which institution is responsible for your wellbeing and safety, as this is also the institution providing the insurance coverage if you need it.

Usually, the supervisor is responsible for supporting their fieldworkers to prepare for fieldwork and be liable for any incidents that may occur while on fieldwork. However, serious incidences should be dealt with at an institutional level. It is incredibly important that you know what to do if a major incident (e.g. physical injury, harassment) occurs. Consider how this also varies depending on where you are working. In the future, institutions could benefit from standardising their policies by implementing a universal safety in fieldwork policy.

Risk assessments

Good risk assessments are the backbone of good fieldwork and are an essential part of your planning. We are not able to provide a complete best practice model for risk assessments as requirements and procedures vary from institution to institution. However, the standard principles of an effective risk assessment should:

1. Identify the risks
2. Consider the likely impact of identified risks
3. Identify the most likely outcomes and any preventative measures or mitigating actions

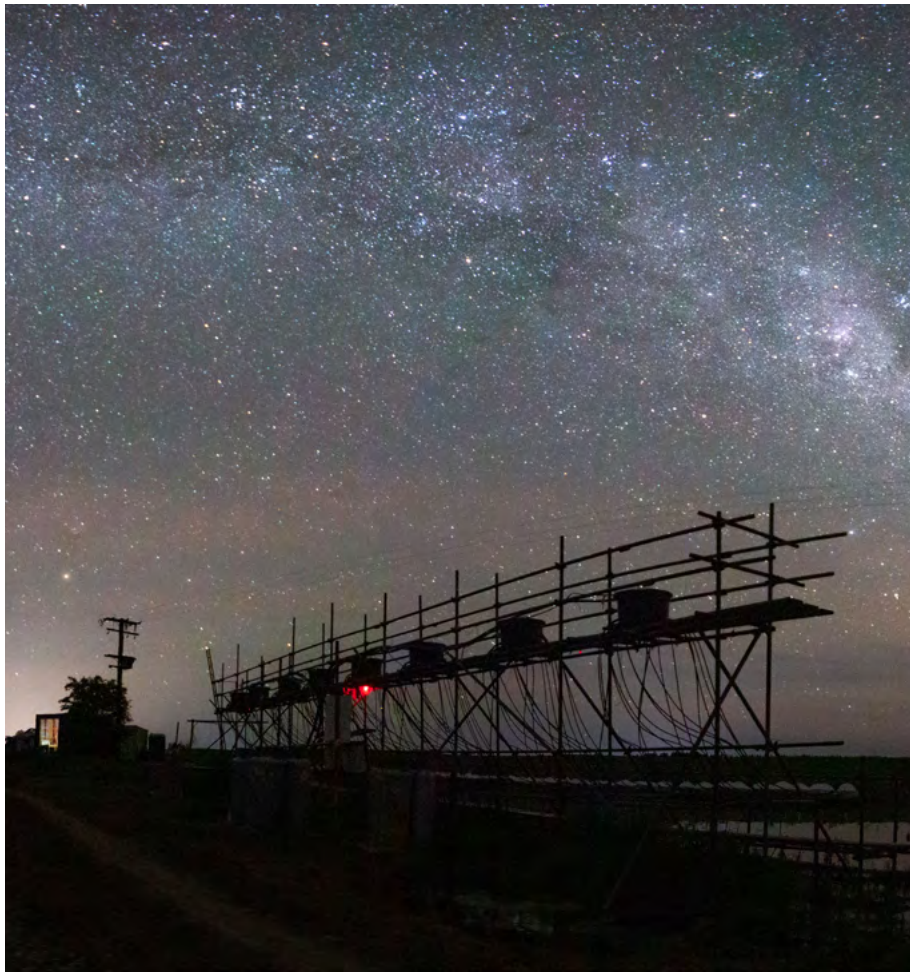
Risk assessments shouldn't be perceived as a tick-box exercise completed during planning and ignored afterwards. Risk assessments are essential and should be read by everyone undertaking, supervising, or collaborating on fieldwork. As documents, they should be updated regularly to reflect changing circumstances. They should be written by the person going into the field and taking the risk.

Risk assessments can be directly linked to institutional **insurance cover,** so it is essential they are completed properly. Once completed they are usually signed off by your supervisor and a Health and Safety Committee. Often risk assessments are centred around physical injury risk and mostly neglect

safety issues regarding an employee's protected characteristics. Consider the following additional risks when carrying out your assessment:

Lone working: institutions often have lone working policies and procedures and it is rarely considered appropriate or safe. Consider whether you are comfortable and whether it is necessary to conduct fieldwork alone. You can and should consider refusing to undertake lone fieldwork.

Verbal, physical, and sexual harassment and assault: some individuals are at greater risk of these forms of harassment. It is important to acknowledge the risks associated with harassment when conducting fieldwork and how to minimise risk e.g. working with another person in the field.



Insurance cover

Ask your supervisor for insurance policy details. Ensure that the risks associated with your fieldwork are covered by your institutional insurance. For fieldwork overseas, you may want to check how the insurance policy covers flight delays/cancellations and accommodation. Institutions may require you to book through their own travel company to be covered by insurance.

Reporting and monitoring systems

Institutions should have reporting procedures in place for incidences that occur during work activities. Knowing what these are, how to report, and what support, including legal is available will help you plan your risk assessments and understand where responsibilities lie if a major incident occurs during fieldwork.

Who's responsible for you?

Do you work within a multi-institutional framework or are co-supervised across multiple departments within the same institution?

Who is responsible for you, provides your insurance, and acts if you encounter difficulties?

Financial support

Obtaining funding is challenging and budgets are often small. If the budget is too small, the fieldwork needs to be scaled back until further funding is obtained.

If you need to spend money related to work activities, your supervisor should have budgeted for this, and you should be assigned a cost code/account. Many institutions have an option to apply for an advanced payment from your fieldwork budget. Given the significant length of time it takes some institutions to reimburse work-related expenses, getting an advance payment can help you avoid incurring unnecessary financial burdens.

Designing programmes and research that involves fieldwork

Here we discuss who is responsible for leading change and advocating for good practices in field-based research and teaching programmes. Such programmes should ensure ecology is an accessible career path for all by considering people, time, place and skills right from the project's conception.

People and time

People involved in fieldwork projects come from a variety of institutions, organisations and career stages. Their influence varies in timing and reach, and it may help project planners and funders at the beginning of a project to think across the breadth of skills and experiences that may be accessible to project partners later in the operational and legacy parts of the timeline. We should all be asking, as funders, organisations or individuals:

- What should our processes be to ensure that everyone can be included and protected?
- Where do we have influence to ensure safe, inclusive fieldwork and when is that most effectively leveraged?
- What is the legacy of this project, and the people in it?

At the proposal stage, realistic planning for project funds is key. Project leaders need to be realistic about what is possible within budgets and timescales, so that the objectives of a project can be met without compromising the safety and wellbeing of its participants. This has ramifications for the people involved in the project in terms of who is recruited, how and where they are trained and carry out work, and how they are supported after the fieldwork finishes. External funders can foster greater inclusivity by requiring checks on project plans and explicitly providing funding to support accessible and safe work. This should include money to hire field assistants, to prevent lone working, or providing alternative support if researchers have caring responsibilities.

Place and skills

Often, fieldwork in remote or challenging environments is treated as more exciting and impressive – an ecology 'rite of passage' – putting immense pressure on those doing fieldwork. A shift in attitude is needed to better

recognise the inherent value of conducting fieldwork closer to home. We should also place more value on transferable skills-based experiences and local knowledge and expertise. Championing and incorporating these into ecological training earlier will make field research more inclusive.

Funding

Money determines the who, what, where, and how in fieldwork. Funders must consider whether the funding offered will enable high-quality fieldwork to be conducted appropriately. In addition to travel, accommodation and equipment, expenses such as permits, field assistants, and local transport can be significant (see the checklist p19) and may fluctuate with changing economies.

As ecology strives to become more ethical, Global North funders must also consider whether projects in the Global South have enough funds to ensure equitable local engagement.

Supervisors should only offer research projects that are feasible with the funding advertised. Encouraging students to apply for additional funding is a great way to build a CV, but it should not be needed to finish projects. Once a project has started, supervisors should not expect students to pay for equipment upfront with personal funds.

Finally, programme leaders must be upfront about hidden costs, such as outdoor clothing and equipment, especially when participants have no field experience. As more of us get more comfortable purchasing pre-used clothing and equipment to reduce our own environmental impact, finding ways to facilitate students purchasing second hand gear and offering advice on what to buy for field courses could reduce these unexpected costs.

Training

Fieldwork training aims to offer practical and hands-on assistance to fieldworkers. These training sessions may cover various aspects, such as safety in the field or specific technical skills. It's important for programme leaders to recognise that not all fieldworkers have the same access to the necessary training, skills, and knowledge, often due to social and economic challenges.

Where possible, institutions should offer funded courses to develop the skills and training for field workers, especially if they are compulsory. Institutional leaders must not overlook the costs of training programmes, particularly for undergraduate students whose fieldwork ambitions often begin on residential courses. If funding courses is not possible, programme leaders should aim to reduce costs or offer bursaries to those who need them.

Checklist for project design

Key factors that research proposals should consider to support safe, inclusive fieldwork:

- Support throughout the pipeline
  - Does this project provide opportunities for all early career scientists?
  - Does the recruitment of project partners and in-country researchers follow inclusive best practice?
  - Does this project facilitate sustainable capacity sharing and community engagement?
  - Does this project provide the training and skills needed to support the people involved in carrying out the fieldwork?
- Availability of funds for advance payments or emergency payments
- Advice on visas (for researchers and dependents)
- Lone working support (e.g. align multiple projects to create a field team or budget for research assistants)
- Specific skills training (e.g. use of specific equipment or software)
- Healthcare (ranging from necessary vaccinations to considering bathroom access)
- Support for carers (e.g. childcare or additional travellers)
- Adequate accommodation (including single rooms as required)
- Field assistants (plus considering how they will benefit)
- Equipment (ranging from pencils to drones)
- Local transport (considering driving licences, vehicle access, local drivers)
- Emergency exit plans (including emergency funds)
- Post-fieldwork debriefing and transition time

Fieldwork is predictably unpredictable

For most of us, most of our fieldwork will be fun, it will be safe, the challenges we encounter will (however serious they may seem on the day) be easy to resolve, and we'll complete our fieldwork (mostly) to plan. This section focuses more on when things go wrong and how to prevent or mitigate for this as much as we can.

Even with the best planning, the experience of being in the field can always throw up surprises. Different people in new situations, sometimes under pressure from adverse weather or uncomfortable working conditions, encounter experiences that can be simultaneously challenging and rewarding. In many respects, the planning phase is the easy bit. The key to successful fieldwork is being able to adapt to unanticipated conditions and events.

Before you go into the field:

- Set realistic expectations about the difficulties you might encounter before you go
- Recognise that fieldwork is hard work and often comes with unforeseen obstacles
- Be prepared to recognise when challenges or circumstances go beyond what should be expected to complete the work.

Working with others in the field

Team building may conjure pictures of corporate away days but in ecology, the nature of fieldwork means that team building is a serious undertaking and the stakes are high if our teams fail to work together. The key to successful teamwork is understanding shared values. This begins with articulating expectations and allowing everyone to contribute meaningfully to the group's objectives.

All members of a field expedition should meet before any fieldwork takes place, and everyone should be briefed on the plans, and health and safety considerations. Input should be sought from all group members, and individuals should have the opportunity to speak to group leaders in confidence. Having supportive and open conversations in advance of fieldwork creates a culture that is supportive and open in the field, and consequently facilitates an early response to issues.

It's good to take a break from each other

Within any professional group, communication is key to maintaining positive relationships. This is particularly true in the field where the safety and wellbeing of group members becomes everyone's responsibility. However, beyond the work itself, fieldwork also demands groups needing to spend substantial amounts of time together and the different expectations of social interactions may be cause for anxiety or tension. The social aspect of fieldwork can be managed by making it clear to the group that alone time is to be supported when people need it. It can be helpful to have some scheduled downtime and set ground rules for managing expectations.

Managing workloads together

Working into the evening can be tiring for many people, especially those new to fieldwork. When evening work is unavoidable, workload should be managed sympathetically to allow the team to rest properly. For many people, their first substantive fieldwork is a completely new experience in terms of physical and mental exertion so care and support should be offered when people are pushing themselves out of their comfort zone.

Harassment and bullying

Different countries will have different legislative definitions of harassment and bullying. Our perception of feeling bullied or harassed also vary from person to person and should be treated equally and seriously. Experiencing harassment and/or bullying during fieldwork can come with its own unique set of challenges which may include:

- Working in a remote location when bullying and/or harassment occurs
- Working in a remote location with the perpetrator
- Language barriers between you and the perpetrator and when reporting
- Different legal systems for definitions of bullying and harassment, and reporting incidences
- Lack of access to immediate support

It is imperative that your institution and supervisor provide you with a protocol to follow if harassment and/or bullying occurs.

Reporting harassment and/or bullying

If you feel comfortable reporting harassment and/or bullying, please tell someone in your team or institution who can support you. This point of contact could be someone you trust to help you navigate the complaints process of your institution. If there is no one in your team or institution you feel able to confide in, perhaps tell a friend or family member. Alternatively, depending on your institution, you could discuss this with a Wellbeing and Support Team, Human Resources, or your doctor. In the UK, there are also various helplines that can offer advice.

Looking after yourself in the field

Stay connected

Fieldwork can invoke feelings of isolation and loneliness. This can either be from remote sites and international time differences making communication difficult, or simply being in a new environment. Before you go, it is important to build a support network you can stay in regular contact with when in the field. Who you stay connected with whilst on fieldwork is up to you, but generally it's good to maintain both personal (e.g. family and friends) and professional (e.g. supervisors, lab group, peers) contact.

Resilience, wellbeing and what to consider if it's in decline

Resilience reflects how much energy it takes us to manage all the competing priorities we are facing. It is not about our skills or abilities, and it isn't just about our work. It's about us doing our work well, feeling well, and being supported while we do it.

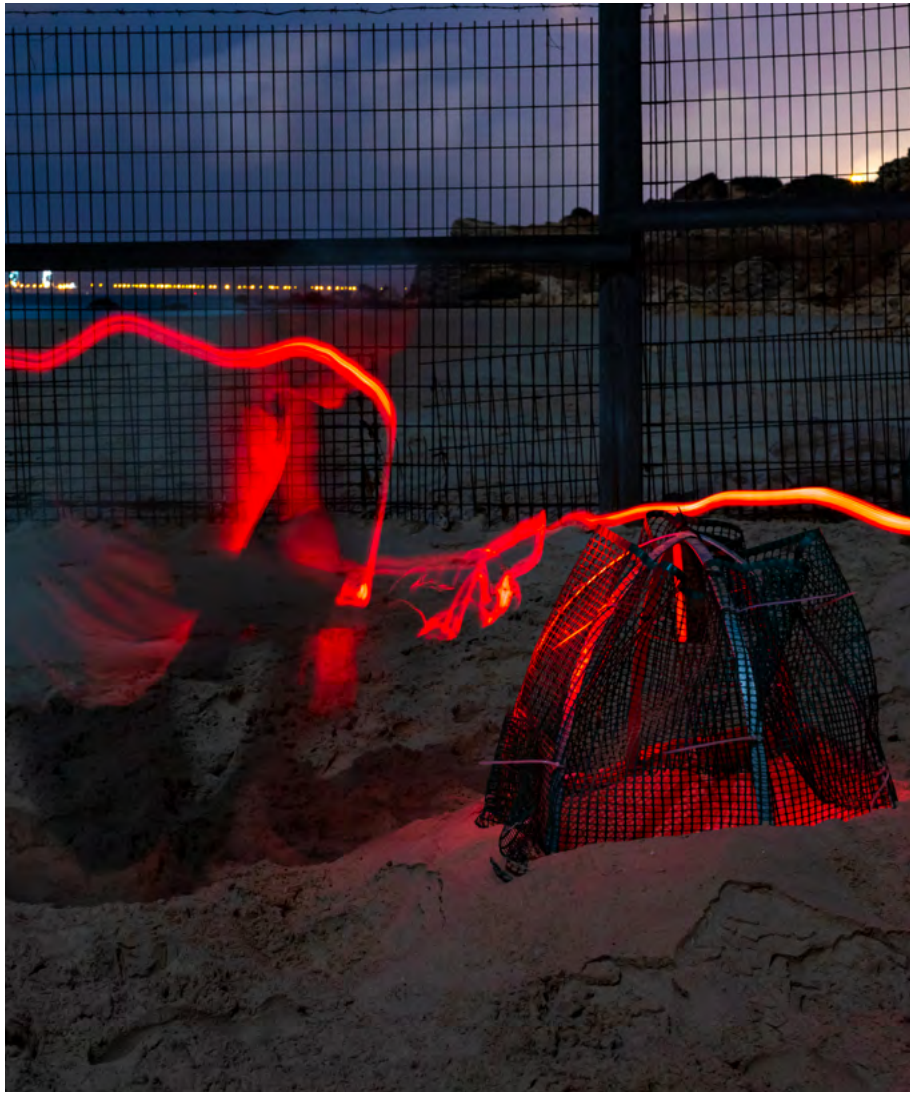
An alternative approach

Think about whether you can change when and how long you stay in the field. For example, could you do multiple shorter trips rather than one long trip?

Throughout your field research, regularly assess your progress and your wellbeing. Reflect on your research goals and their feasibility throughout the fieldwork if the circumstances turn out differently from your initial expectations. If it becomes apparent that the challenges are significantly impeding progress and compromising the integrity of the research, then it might be worth considering the option of cutting your losses and returning home. Finally, wherever possible, engage in open and honest conversations with your advisors and mentors about the difficulties you're facing.

Evacuation plans

Any risk assessment should include an evacuation plan. This is especially true in locations where there is of high risk of harassment, violence, disasters, and disease outbreaks. Evacuation plans should include a clear decision making process for those in the field, key triggers, key contacts and funding mechanisms.



Coming back from fieldwork

Even the least surprising fieldwork completed by the best prepared researcher can mean coming home physically and mentally exhausted.

Returning from fieldwork can sometimes feel isolating, especially when transitioning from remote or international settings or from a long period of limited connectivity. Reaching out to colleagues, mentors, and networks to gradually reconnect with the workplace and engage in social activities can be helpful during this transition time.

Reintegrating back into day-to-day work

Incorporating adequate transition periods into the schedule can enhance the effectiveness of data organisation, analysis, and subsequent writing and publication processes. Rushing into other responsibilities immediately after fieldwork may hinder these critical tasks. Supervisors should emphasise the significance of transition periods during fieldwork preparation and support effective transitions after fieldwork.

Debriefing and learning for future trips

After the rest and subsequent reintegration into everyday activities, engaging in thoughtful reflections about fieldwork can be very helpful. Scheduling a debriefing session with the field team to discuss the fieldwork experience should be incorporated as a core activity after fieldwork completion. Research groups can create a living document that serves as a repository of fieldwork protocols and advice for future trips.

Greater attention should be given to the value of debriefing post-fieldwork. Debriefing is the opportunity to reflect on what went well, whether there were any setbacks or surprises. Acknowledging the challenges does not diminish the experience but rather presents an opportunity to learn for future fieldwork design.

Sharing and believing the experiences of others (no one ever believes how hard it is!)

When conducting fieldwork in international or remote settings, it is crucial to hear the advice of those with experience doing fieldwork, especially in challenging conditions. Everyone with knowledge of what to expect should aim to share their experiences as openly as they can. Different people will have varying experiences of the same sites and teams. Everyone's perspective is valid, and we need to hear them all. Such conversations foster inclusivity, respect, and proactive problem-solving, making everyone feel supported and prepared.

Giving back to local communities

Increasing recognition has been paid not only to the ethical conduct of fieldwork, but also to the ethical sharing of results with participating local communities. Terms such as parachute science, helicopter research or parasitic science have been used to draw attention towards extractive research practices that only benefit visiting researchers without acknowledging or recognising the contribution of the local community. There have been efforts to make research more equitable and mutually beneficial and demonstrate how research can meaningfully engage with local communities. This subject should be a guide all by itself.

One quick solution to stop helicopter research is to recognise that knowledge comes in many forms and a diversity of understanding ultimately improves research. Your institution should also have their own evolving policies and advice to prevent parachute science. Preventative action begins at the research design and funding phase, through fieldwork, and into the publishing phase of research. So even if you aren't involved in all stages, there are always ways for you as an individual to champion ethical participation along the research timeline. First, by identifying how fieldwork and its outputs will impact both local communities and those conducting the research and identify ways to improve the research design. Second, by adhering to inclusive best practices and conduct while in the field, including behaving respectfully. Third, by recognising everyone's contributions appropriately, keeping people informed on the research outputs, and by seeking feedback from all those impacted by the research to feed into future research design.

Further reading

Planning for ethical fieldwork: Picot LE & Grasham CF (2022). **Code of Conduct for Ethical Fieldwork**. University of Oxford

Article on improving fieldwork experience for women: Hamylton S, Vila Concejo A, Power H & Gallop SL (2023). **Fieldwork can be challenging for female scientists: here are 5 ways to make it better**. The Conversation

Two articles on research and local communities:

Adame F (2021). **Meaningful collaborations can end 'helicopter research'**. Nature Careers Community

de Vos A & Schwartz M (2022). **Confronting parachute science in conservation**. Conservation Science and Practice

Useful resources

Foreign, Commonwealth & Development Office (FCDO) provides up to date travel advice and guidance for UK citizens – www. gov.uk/foreign-travel-advice

The Fieldwork Initiative includes contact details if you find yourself in a difficult situation – www.fieldworkinitiative.org

Acas (the UK Advisory, Conciliation and Arbitration Service) provides professional advice on any workplace matter including bullying and harassment – www.acas.org.uk

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Image credits

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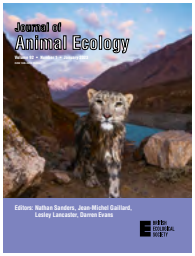
BRITISH ECOLOGICAL SOCIETY JOURNALS

Journal of Ecology

Original research papers on all aspects of the ecology of plants (including algae), in both aquatic and terrestrial ecosystems



Journal of Animal Ecology

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