

A close-up, profile view of an orangutan's face, showing its nose, mouth, and thick, textured fur. The image has a blue and green color cast, giving it a somewhat ethereal or scientific feel. The background is blurred, showing hints of a natural environment.

**USING ETHNOGRAPHIC RESEARCH
FOR SOCIAL ENGAGEMENT:**
A toolkit for orangutan
(and other) conservationists

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Preface

In recent decades, it has become clear that conservation is as much about humans as about nonhuman species, landscapes, and ecosystems. Conservationists often work in places that are owned, lived in, and used by people, who may think about and relate to the environment and species present in many different ways. For any conservation programme to succeed, then, it needs to devote time, careful thought and resources towards understanding and engaging with people. This means that it is vital to start by learning about local cultures, social relations, moral concerns, political organisation and worldviews – and then building on such knowledge to design conservation programmes specifically for those contexts.

Ethnographic methods are one important way of learning about these local, contextual factors. In contrast to, say, surveys and questionnaires, ethnographic research aims to create a holistic understanding of i) people's everyday interactions; ii) their perspectives on important issues, such as land rights, development, conservation and the state; and where relevant, iii) their previous or current experiences of conservation programmes, projects and practitioners. But what exactly do these methods involve, and when and how can they be used effectively and ethically by conservationists?

This toolkit aims to equip conservation practitioners with a better understanding of the principles of ethnographic research, a selection of its key methods, some tips and considerations for carrying out such research, and guidance for analysing and reporting. It draws on the real-life experiences and research of its authors, who are all social anthropologists and have carried out fieldwork in Borneo on indigenous communities and orangutan conservation. Where possible, we strongly recommend collaborating with trained social scientists who are familiar with such methods in designing conservation projects – and doing so from the very beginning. However, in situations where this is not possible or unfeasible, this toolkit can be of practical use to both people working in orangutan conservation and conservation practitioners more generally.

There are four main chapters in this toolkit. Chapter 1 identifies common challenges faced by conservation projects as they try to balance the demands of local communities, funders and common project models. Chapter 2 then lays out some basic considerations and guidelines for planning social research and community engagement programmes in rural conservation areas. Chapter 3 provides an overview of the principles of ethnographic research, and introduces three main methods – participant-observation, semi-structured interviews, and visual or sensory elicitation. Finally, Chapter 4 offers pointers on how to analyse and write up ethnographic data.

Notes: Many of our main points are illustrated by case studies. These are fictional and do not refer to any particular community, area or conservation scheme. However, they do draw on real-life examples and issues that we have encountered in the course of our fieldwork and research. All images used in this toolkit (except the front and back covers and on p.24) are the copyright of the Global Lives of the Orangutan and POKOK projects.

1. Introduction:

Common challenges for conservation when engaging with rural communities



Conservation practitioners often have to address (international, national or local) donors' and counterparts' requirements and goals, while ensuring that conservation activities make sense to and benefit local communities. One important reason for this is that 'international' conservation strategies—which vary considerably—tend to revolve around general templates and ideas that may or may not work in local contexts. This can thus cause a mismatch between international conservation concepts and categories and local needs and understandings. For example, sustainable livelihoods programmes tend to focus on humans' utilitarian control of 'nature' and its economic benefits while glossing over the social, religious, or emotional ties local people may have with their environments. Similarly, education activities often present knowledge about 'nature' as separate from its human bearers, practices and relationships. This, however, can contrast with indigenous and other ways of knowing, living in and engaging with the environment.

The problems caused by such conceptual discrepancies can be exacerbated by time and funding pressures faced by conservation organisations. The urgent project-based interventions with clear end-points and overambitious goals of many international conservation strategies, for example, can impede long-term planning on the part of local conservation organisations and create heavy workloads for staff on the ground. Limited, short-term funding can put organizations under pressure to use scarce resources and personnel as efficiently as possible – for example, by only visiting villages for specific conservation-related reasons (e.g. confiscating captive animals, disseminating information, scientific research, one-off surveys, trialing new conservation initiatives), and may prioritise quantifiable short-term 'wins' over more meaningful but difficult to quantify longer-term gains. Furthermore, the input and priorities of local staff can get sidelined because project reports need to be written in the language of international conservation, which they may not be trained to do.

Such project-based short-termism makes it difficult to develop long-lasting, trusting relationships with local stakeholders. Small-scale communities generally have their own expectations of such projects and what they see as the rich, powerful organizations behind them. Our research in rural Borneo suggests that many villagers want to see swift, concrete¹ results from conservation activities, such as contributions to local infrastructure or material aid. Often, however, villagers feel that conservation projects require them to do much work with highly uncertain returns. At the same time, they often see such projects as an opportunity to establish enduring relations with powerful outsiders. Rural Bornean communities that are enrolled in conservation projects frequently feel frustrated when conservationists ‘parachute’ into local areas for specific purposes and then disappear again.

Short and irregular conservation visits can thus be counterproductive in the long run. They can give local communities the impression that conservationists care more about animals² or plants than about humans, leading to resentment over conservationists’ presence. They can also cause confusion or suspicion over conservationists’ intentions, especially when rumours or misunderstandings spread unchecked. If conservationists try to establish new programmes later on (e.g. permaculture, forest protection measures), they may find it harder to gain communities’ trust because of their earlier reputation for ‘parachuting’ in and out. This also means that when communities do need to get in touch with conservation staff (e.g. to report human-wildlife conflict or hand over a captive animal), they may be less willing to do so or simply may not know how.

When rural communities do not engage productively with, or even actively resist, conservation programmes, this is often put down to a lack of environmental awareness, or a problem in their mindset. This interpretation leads conservationists to try to remedy the situation by devising campaigns and educational programmes that can foster conservation mindsets and environmental awareness in rural areas (see Figure 1). However, our research suggests that a unidirectional effort to change others’ behaviour cannot work unless conservation workers are able to build up relations of trust with their local counterparts and create new forms of engagement. Central to this is the need for conservationists to constantly reflect on their own ideals, assumptions and models, and to constantly consider how to make these more relevant to the local context.



1 Schreer, V. (n.d.). The absent agent: Orangutans, communities, and conservation in Indonesian Borneo.

2 Meijaard, E., & Sheil, D. (2008). Cuddly animals don't persuade poor people to back conservation. *Nature*, 454(7201), 159–159. doi: 10.1038/454159b

All these concerns point to an urgent need for changes to conservation funding and evaluative models, as well as a move towards genuinely community-led projects that reflect local priorities and ways of interacting. It is vital that conservation donors and funding panels, as well as conservation directors and managers, recognize the need for flexibility and contextual modification on the ground and make the necessary organisational adjustments to allow for alternative approaches to community engagement. This means not only rethinking the short-termism and often overly ambitious goals of conservation projects, but also recognising the validity of more qualitative forms of social research and the long-term relations that they can help to develop.

In the next chapter, we outline some considerations and guiding principles for conservationists seeking to build up long-term relations of trust and respect with local communities, which can help mitigate some of the problems identified above.

Figure 1: Children inspect a recently distributed poster about nature conservation.



2. Designing social research and engagement: key considerations and guiding principles

Local stakeholders including forest communities or ethnic groups are invariably complex entities. Indigenous villages a few kilometres apart can speak different languages and have very different livelihood strategies, religious practices and internal politics. Even within villages there can be multiple groups and institutions that control, manage, and exploit resources in diverse, sometimes conflicting, ways. Opinions, politics and practices can also vary tremendously from one individual to another. It is thus important to understand the specific context of each community or area, and design social interventions/conservation programmes that make sense within that context. This requires first doing some basic social research—including on topics that may seem irrelevant to (an immediate) conservation (goal), but that could be key to understanding local realities and establishing good relations with local people, and thus promoting the long-term success of conservation efforts in the area. Here, we identify some important factors to consider when starting research in and designing conservation programmes for an unfamiliar area.

KEY CONSIDERATIONS FOR SOCIAL RESEARCH

As mentioned in Chapter 1, conservation projects can be hampered by a mismatch between models and local realities. Conservation programmes and practices should, ideally, always be tailored to fit their specific context. But how do you even start to learn about these contexts? What should you look out for when designing social research? In this section, we highlight some key concerns to take into consideration when planning social research and engagement in a conservation context.

- **Concepts and categories:** International conservation policies and practices are often built around basic categories such as ‘nature’, ‘culture’, ‘ecosystems’ and ‘species’. However, these categories often derive from Western scientific taxonomies and may not have the same meanings elsewhere (and indeed within the international scientific literature). For example, the idea of a pristine ‘nature’ without humans in it is fairly alien to many indigenous Bornean societies, who often view the forest as made up of entanglements between humans and nonhumans, including animals, plants, spirits, water, wind and rocks. Similarly, international species taxonomies do not always align with local taxonomies. For example, there are different indigenous names³ and categories of ‘orangutan’ across Borneo, which may be more meaningful to local people than ‘scientific’ taxonomies. Rather than simply directly applying ‘international’ conservation categories and concepts to different contexts, it is more important to learn about local terms, concepts and categories and try to build conservation programmes around them.

3 Rubis, J. M. (2020). The orang utan is not an indigenous name: Knowing and naming the maias as a decolonizing epistemology. *Cultural Studies*, 34(5), 811–830. doi: 10.1080/09502386.2020.1780281

- **Relationships with the environment:** Communities and individuals relate to their environments in different ways, which can shift from one day, season or year to the next, and may not always be consistent even within an individual village. Sometimes their actions may seem contradictory, e.g. protecting forests and preventing industrial logging at the same time. Some things worth considering are: How forests are categorised locally (e.g. cultivated/fallow areas, ancestral land, community land, 'taboo' areas), varying residence⁴ patterns (e.g. moving between village, farms and urban areas), how livelihood⁵ strategies change seasonally or opportunistically, and how gender, age and status shape people's relations with the environment. Local people may also have contrasting priorities and hopes for their future and environment, which may or may not align with those of conservationists. Learning about all this can be crucial to understanding people's varying attitudes towards the forest and wildlife, as well as their likely responses to proposals for alternative livelihoods and other conservation interventions.
- **Moralities:** The choices made by communities and individuals are shaped not only by economic considerations but also by moral and ethical concerns. For example, rural villagers in Borneo don't always see conservation as morally different from oil palm or other extractive industries. Both conservation organisations and companies are seen as outsiders that bring economic opportunities, but also social and political risks, e.g. displacement and loss of forest access, and potential community disputes. It is thus important to learn about and work with local beliefs, moral priorities and social conventions (i.e. adat, or customary law). It is also useful to identify and engage with the individuals who define and enforce such conventions, e.g. ritual specialists. For example, conservationists could follow local conventions surrounding the relationship between guests and hosts, which may shape communities' responses to outsiders entering their area.
- **Social structures and inequalities:** It is important to understand these for a few reasons. First, understanding how communities are organised and governed is vital for effective communications, e.g. channelling messages through trusted and influential individuals, and the implementation of conservation programmes. Second, knowing how local politics and structures operate can alert conservationists to potential problems that their interventions might create or exacerbate. For example, conservationists might consider whether a proposal will be co-opted by the village elite while disenfranchising others, or whether it may cause new imbalances within the community. This in turn can prompt conservationists to think practically about how conservation can benefit the community at large.

4 Ishikawa, N., & Soda, R. (Eds.). (2020). *Anthropogenic Tropical Forests: Human–Nature Interfaces on the Plantation Frontier*. Singapore: Springer. doi: [10.1007/978-981-13-7513-2](https://doi.org/10.1007/978-981-13-7513-2)

5 Thung, P.H. (2019). 'Notes on puri farming.' POKOK blog post: <https://pokokborneo.wordpress.com/2019/05/30/notes-on-puri-farming/>

- **Local histories:** For many indigenous and non-indigenous Bornean societies, the forest is a repository of memories and traces from the past, imbued with stories of migration, mobility, and kinship formation). Being aware of these histories and their present-day effects is crucial. Local histories can offer insights into how different people relate to their environment, as well as into local regimes of access and ownership over forest resources. For example, communities that were formed or reshaped through migration during resource booms may have different relationships to the environment and outsiders compared with communities that were formed through gradual migration, sudden displacement, or governmental transmigration schemes. Taking note of all this can help conservationists design more appropriate land-management schemes and avert potential conflicts.
- **Relations with outsiders:** Migration histories are often linked to communities' relations with outsiders, such as the government, companies and NGOs. Certain communities may have closer or tenser relations with government officials than others. Some have long histories of working with or being visited by different NGOs, which can positively or negatively influence their responses to later NGO approaches (including from conservationists). It is not uncommon for members of one community to 'juggle' relations with different outside parties, including the state, companies, conservationists and development agencies.

When approaching a new area, it is thus important to find out about any previous conservation/NGO/development work in the area, what relations and perceptions this created, and how best to build on or depart from such work (see Figure 2). For example, if villagers in a certain area had negative experiences with conservation schemes that restricted access to their land, it is vital to address those concerns first and ensure that the same mistakes are not repeated. It is also important to consider how gender, class, ethnicity, or religion influence who is participating (or not) in externally introduced activities. For instance, rejecting a meal offered by villagers because of religious concerns can be seen as an offence against their hospitality and create distance between local people and visiting conservation staff.



Figure 2: Ragged tarpaulin sheets, a banner with fading text, and empty plastic bags mark the location of a completed sustainable livelihoods project.

CASE STUDIES⁶

THE DAMMAR PROJECT

A conservation NGO conducted a household survey at the beginning of a new community development programme. Its goal was to assess local people's economic activities in order to inform its project design. The NGO workers stayed for six days in the community to interview villagers about their livelihood strategies. When asked what their major livelihood was, the majority of people responded 'searching for dammar (resin)'. Their answer seemed to make sense. People left early in the morning for the forest. In the evening or a few days later they came back with rice bags filled with dammar. They dried the resin in front of their houses (see Figure 3); and sold it to a local middleman who resold it to another middleman in the next village, who then sold it to a trader in the nearby town. Due to their weak bargaining power and the number of middlemen involved, the villagers received very low prices for their dammar. NGO staff thus thought that developing a local dammar project that circumvented the middlemen would benefit the villagers. After reviewing their survey data, which confirmed that dammar collection was the primary source of income, NGO staff returned to the village to propose the idea of a dammar project to the villagers during a community meeting: The NGO would find a trader who was willing to buy dammar directly from the villagers. The few people who attended the meeting were enthusiastic and agreed. Three months later, the NGO workers returned again to check on the progress of the dammar project. However, hardly anyone was still collecting dammar, and most people were now engaged in fishing. The dammar price had dropped and the dry season arrived: People could set up their net and hope for a big catch. The dammar project dissolved before it really started.

This example illustrates that long-term presence is vital for understanding local ways of life and relationships with the environment. Results from surveys that seek to document local economic activities need to be understood as a snapshot and triangulated with other methods (e.g. seasonal calendars, diaries) to make sure that conservation activities are adjusted to local needs and conditions. Most Bornean indigenous societies flexibly adapt their livelihood activities to the shifting resources of the environment and changing political-economic terms and conditions. This 'surfing on waves of opportunities'⁷ creates a highly flexible and independent working routine that has implications for conservation's social research and engagement.

6 All case studies in this toolkit are fictionalised, but based on our research experiences and observations.

7 Gönner, C. (2011). Surfing on Waves of Opportunities: Resource Use Dynamics in a Dayak Benuaq Community in East Kalimantan, Indonesia. *Society & Natural Resources*, 24(2), 165–173. doi: 10.1080/08941920902724990

First, to develop meaningful community development projects it is essential to observe people's activities over a longer time span, either continuously or through regular shorter visits. Second, villagers may not always be present to engage in conservation activities, as they are busy with other things or work outside the village. Third, people may engage in seemingly conflicting economic activities (e.g. conservation work and logging) without sharing the same moral concerns that conservation staff might have. Fourth, then, if people join conservation activities, such as attending a meeting or training, this may involve an economic loss, and villagers may expect to be compensated for that. And, fifth, to flexibly respond to economic opportunities and keep their independence, people may be reluctant to become non-permanent conservation staff that need to be constantly on stand-by to be hired on a daily basis.



LOCAL EXPECTATIONS OF RECIPROCITY

Researcher A settled with her research assistant in a local community to study the interaction between the villagers and a conservation organisation. The two women rented a house to avoid possible conflicts of interests, as the villagers were divided about the conservation schemes. Soon after they had settled, a neighbouring woman came to their home with mangoes. The next day, another neighbour brought rice. And on another day, someone brought cassava leaves. Researcher A was surprised and pleased about these gifts. Her assistant, who came from the area, explained that these gestures were customary and that it would be appropriate for Researcher A to give something back to the neighbours. Although unspoken, the women expected something in return. To adequately respond to the women's gifts, Researcher A began to share fish, vegetables, and other things with the neighbourhood, and over time an exchange relationship developed that allowed Researcher A to learn about local forms and expectations of reciprocity.

Figure 3: Dammar (resin), a common forest product, needs to be dried before it is sold on.

Through the regular, informal visits of her neighbours Researcher A also gained deeper insights into the villagers' views of the conservation project. People bemoaned a lack of participation, information sharing, and benefits for the wider community. They complained that the 'NGO people' used the local road and suspension bridge to transport their equipment to the forest, but never helped to repair them. Several times they had asked for support, but the 'NGO people' had simply ignored their request. On another occasion, some women talked about how some of the NGO staff had become ill with unusual symptoms. The women were sure that the NGO workers were disturbed by place-based spirits, as they had never asked the latter for permission to carry out their conservation activities on village grounds (see Figure 4). Instead of dismissing or laughing at these concerns, Researcher A took them seriously.

Through her immersion in local everyday life, Researcher A gained important insights into local beliefs, moralities, and concepts of health and well-being, and other concerns that would have been hard to capture through interviews or surveys. From these, she realised that the villagers did not consider the training and workshops offered by the organisation to be adequate returns for their hospitality, but, rather, hoped for concrete material contributions to the local infrastructure. From the villagers' perspective, the NGO had obviously violated local forms and expectations of reciprocity, which in this case also involved requesting permission from spirits through ritual offerings. Instead of investing in another conservation activity, Researcher A learned that conservation organisations should take the time and effort to learn about villagers' preferences so as to adequately respond to local needs and expectations – even if these were not directly linked to conservation goals.

Figure 4: During a break in their forest-clearing activity, swidden farmers are gathering plant material to prepare for a ritual.



SOME GUIDING PRINCIPLES FOR SOCIAL ENGAGEMENT

As the previous section reveals, understanding and working with different local concepts, relations and priorities is vital to successful, long-term conservation planning. Without understanding or respecting the specificities of local contexts, conservationists are liable to run into avoidable problems. With this in mind, how better can conservation social research and engagement be designed? In this section, we outline some guiding principles for interacting with local communities in pragmatic, ethical ways and designing contextually appropriate conservation interventions. Like the considerations above, these are inspired by our fieldwork in Borneo but could also be applied elsewhere. Importantly, these also point to the need for conservation funders to support long-term, socially-engaged strategies and not just target-driven, short-term projects.

- **Pursue a strategy of good relations.** Given time and funding pressures, it may be tempting to start outreach and education programmes as quickly as possible. But such strategies can cause more problems than they solve, especially if communities feel that they are not properly consulted or being disrespected. One way to mitigate this is to adopt a policy of making friends first and conservationists later. This means taking seriously and respecting local people's concerns, and – more importantly – relating to them as equals and even friends. It means taking the time and effort to get to know people as fully-formed social beings rather than as mere targets for conservation, and earning their trust and respect over time. Such an approach requires longer and more consistent engagement than is routine in conservation, but can yield much greater long-term benefits. Putting good relations and trusted individuals in place at the beginning can make communities more receptive to later conservation programmes and engagements. One possible way to achieve this is to train and hire local people as staff (see Figure 5). Although this comes with its own risks (e.g. personal histories and biases), the benefits will likely outweigh the costs.
- **Set realistic goals:** Focus on concrete, realistic activities that can be carried out with your existing budget, personnel and time frame. Having fewer but more feasible activities can ease pressure on staff and give them space to focus on other things, such as cultivating good relations with local people. It is important that funders recognise the value of such low-key, consistent activities in building up a more effective, ethical conservation presence in the long run. To this end, it is helpful to think of conservation as a process⁸ rather than a set of outcomes.



8 Sayer, J., & Wells, M. P. (2004). The Pathology of Projects. In T. McShane & M. P. Wells (Eds.), *Getting Biodiversity Projects to Work* (pp. 35–48). Columbia University Press. doi: 10.7312/mcsh12764-005

- **Identify and follow local concerns:** Try to find out what people are concerned about, even if these concerns seem to have no direct link to conservation (e.g. lack of permanent healthcare, church renovation). Showing an interest in local concerns will be seen as a sign of respect and care, as well as an indication that you don't only see people as conservation targets. Consider how conservation interventions can be guided by, connect to, or at least acknowledge these local priorities. By finding ways to align conservation and local concerns, you increase the chances of your efforts being well-received and successful.
- **Start small:** Another way of gaining people's trust is by starting with small events or activities that aren't necessarily related to conservation, but that allow local stakeholders and conservationists to get to know each other. For example, to learn about issues of food security, cooking workshops with women are a good entry-point, as you can discuss in an informal setting what people eat, how, and why this might have changed. To learn about local uses of forest products, such as rattan or bamboo, start your conversation by having people show you their various baskets, traps, and other household items. Or watch a film with villagers and have an open discussion afterwards to get to know people and observe who attends, who speaks up, etc. as this can provide useful insights into local social and political relations.
- **Work with difference:** When you encounter very different world-views or 'mindsets', it may be tempting to try to change them. But in some cases, it may be more effective to work with those differences to achieve similar goals. For example, Bornean villagers are often less interested in orangutans⁹ than in other animals, such as pigs, hornbills or fish. Instead of trying to get villagers interested in orangutans, conservation NGOs could focus instead on using these animals as proxies through which to form relationships. For example, one NGO has built on the importance of fish and fishing for local Dayak Ngaju livelihoods to design new projects that benefit the local environment, including humans, fish¹⁰ and orangutans.

9 Chua, L., Harrison, M. E., Fair, H., Milne, S., Palmer, A., Rubis, J., ... Meijaard, E. (2020). Conservation and the social sciences: Beyond critique and co-optation. A case study from orangutan conservation. *People and Nature*, 2(1), 42–60. doi: 10.1002/pan3.10072

10 Thornton, S. A., Setiana, E., Yoyo, K., Dudin, Yulintine, Harrison, M. E., ... Upton, C. (2020). Towards biocultural approaches to peatland conservation: The case for fish and livelihoods in Indonesia. *Environmental Science & Policy*, 114, 341–351. doi: 10.1016/j.envsci.2020.08.018

- **Look beyond the immediate context:** Often, the most interesting findings stem from encounters, conversations, and things that seem to have nothing to do with the original subject matter. As the next chapter explains, keeping your research and programme design open-ended and flexible allows you to look beyond the immediate context and engage with the messy and unexpected elements of people's lives, including factors that may ultimately end up determining the success or failure of conservation.

Figure 5: A group of villagers write down their observations during a routine patrol of a village forest



3. Ethnographic methods

One way of learning about local cultures, values, politics and social organisation is by carrying out ethnographic research. This is research that aims to generate an 'inside', in-depth understanding of people's everyday lives, thoughts and practices. As such, it differs from quantitative social science methods such as surveys and questionnaires. This section introduces some key features of ethnographic research, then highlights three main research methods that can help conservationists understand and approach local communities and contexts.

WHAT ARE THE MAIN FEATURES OF ETHNOGRAPHIC RESEARCH?

- Ethnographic research is *open-ended and inductive*. This means that instead of asking a fixed set of questions (sometimes with pre-defined answers) or testing specific hypotheses, ethnographers allow their research to be guided by what they find in the field, as their work progresses. Anthropologists often describe themselves as 'students' of the community they're working with, because they are there to learn about its history, culture, social organisation and daily life. Ethnographers aim to understand people's own questions, answers, concerns and concepts, i.e. to get their point of view. Often, this means being willing to challenge our own familiar concepts and assumptions and to acknowledge that these may not apply to other contexts.
- To achieve this, ethnographic research requires *time and immersion* in specific contexts. This could be for as long as 1-2 years or as little as a few weeks (sometimes with repeat visits over a longer period). The important thing is that the researcher gets the time and space to explore as many aspects of the community's life as possible, not just those related to conservation. Simply being there, listening¹¹ and learning can allow for more informal interactions with a wider range of people, who may be more willing to share their thoughts and experiences without the formality or expectations of surveys or questionnaires.

11 Staddon, S., Byg, A., Chapman, M., Fish, R., Hague, A., & Horgan, K. (2021). The value of listening and listening for values in conservation. *People and Nature*. doi: 10.1002/pan3.10232

- For these reasons, ethnographic research prioritises *depth, engagement and qualitative analysis* rather than breadth, comprehensiveness and quantitative reach. In-depth, detailed research in a small number of fieldsites is as rigorous and legitimate as large-scale quantitative research, and can offer important insights that would not be attainable through survey or questionnaire-based methods. Ethnographic insights can thus complement, extend and sometimes challenge large-scale quantitative approaches.
- Ethnographic research aims to describe and analyse things in their *wider contexts*. Humans' actions and decisions are never isolated, one-off events: they're influenced by specific social or political pressures, cultural/moral/religious values, community and individual histories and experiences, and economic considerations. Understanding all these can help us make sense of how people respond to specific episodes, such as conservationists' arrival or human-orangutan conflict. For example, a community's lack of engagement with a conservation programme may be due to different reasons: concerns about losing land, stronger interest in other livelihoods (e.g. oil palm smallholdings, mining), lack of interest in the proposed programme (e.g. starting an ecotourism programme in an area where people have no customary links), or a previous negative encounter with an NGO/conservation group. Sometimes there are disagreements within the community that lie beyond outsiders' control. All these factors make up the context in which conservation has to operate. It can be hard to find out about these issues through formal meetings or socialisation events. However, ethnographic research offers some tools for identifying such factors and making sense of these wider contextual concerns.
- Ethnographic research will always be shaped by *who the ethnographer is* and how others relate to them. When planning, it is useful to think about who can/should do research where, and how. But nobody can learn and do everything. It's thus important to make the most of who you are. For example, a young female researcher may have limited access to certain male-dominated spheres of life, but may have better access to women's conversations and activities. This is thus an opportunity to learn how women and girls relate to the forest or shape decision-making processes. It is also important to consider how others might view and interact with the researcher, either as an individual or as part of a larger group of organisation (e.g. a conservation NGO, an ethnic/religious group, part of an urban middle class). For example, a villager may be less willing to discuss their hunting practices or views of endangered species with a conservationist because they are afraid of getting into trouble. It is thus useful to think about how to work round or overcome such perceptions (e.g. by carefully phrasing questions, or by establishing relationships of trust with people so that they're more willing to discuss sensitive issues over time).

- Ethnographic research is an *analytical, reflexive process*. Ethnographers don't make a clear distinction between 'fieldwork' and 'analysis'. Rather, they constantly step back and assess how the research is progressing and adjust their methods and questions accordingly. Ethnographic methods can also be applied outside a 'formal' period of research or research site. For example, you can do ethnographic analyses of social media posts, newspaper articles or TV documentaries by analysing their language and imagery or putting them in their social or historical context.

ETHNOGRAPHIC RESEARCH METHODS: SOME EXAMPLES

There are different methods that you can use to do ethnographic research, in keeping with the principles outlined above. Here, we outline three methods that can be especially useful for conservationists approaching local stakeholders: participant-observation, semi-structured interviews, and visual and sensory elicitation.

#1: Participant-observation

Participant-observation is the core method of socio-cultural anthropological research. It involves immersion in the life and/or activities of a site or community (e.g. a village, an NGO, an event) for an extended period of time, ranging from a few weeks to over a year. As the name suggests, such research involves both observing and participating in various aspects of everyday life, e.g. farming, building, fishing, travelling, cooking, attending meetings, prayers/rituals and other events. This gives the researcher time and space to meet a wider range of people than they might otherwise meet through official meetings or interviews, and to gain **informal, candid insights into everyday life**. By paying attention to the ordinary dynamics and activities of a fieldsite, the researcher can build up a fuller 'inside' picture of people's lives, experiences, concerns, hopes and decision-making processes. Many of these cannot be captured through surveys or interviews, but can only be noticed through regular participant-observation.





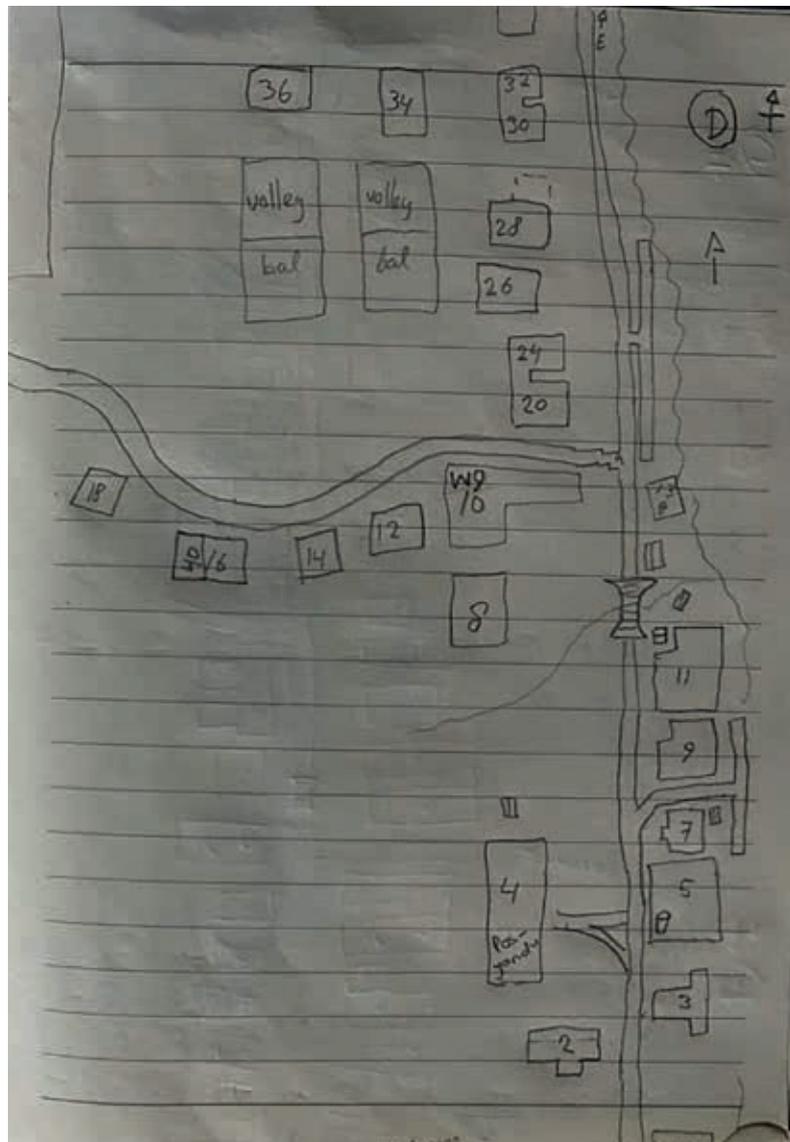
HOW DO YOU DO IT? SOME TECHNIQUES AND IDEAS

- In participant-observation, the researcher is also the **research tool**. You can draw on your personal identity, experiences, skills and so on to interact with others and learn about/from them. Liking a certain sports team or pop singer, playing football, teaching English or another language, or wanting to learn certain local skills: these are all possible ways of creating rapport and making conversation. This sort of participation can help to 'humanise' you and establish good relations with people while offering insights into local practices and concerns. For example, participating in agricultural activities may give you a better understanding of how cooperative systems function, how people manage their land and crops, and how they adapt to different economic opportunities and problems. Some of these activities are also a good way to give something to the community, e.g. through language skills, helping out with specific tasks (e.g. building, farming, cleaning).
- **Preparation** is essential. While you can't fully predict what will happen in the field, you can take steps to make your research ethical and effective. Some things to think about include: How will you enter the field? Who will be your initial contact point/entry into the community? How will you introduce yourself, your work and interests? What activities can/might you try to observe/participate in? What can you contribute to the community, e.g. teaching at the local school (see Figure 6), helping with agricultural work, documenting traditions, making small contributions to collective funds or local projects (e.g. repairing water pipes)? At the same time, it would be worth considering in advance what you are unable to do, e.g. take sole responsibility for someone's medical fees.

Figure 6: An ethnographer teaches English at a local primary school to reciprocate the community's hospitality.

- When starting to work in a community, make sure you learn about and follow local conventions surrounding **guest-host relations**. These conventions can open up important new relations and avenues for research. For example, ask if you can follow your hosts as they go about their daily tasks, enter the forest and meet other people. Get to know their relatives and neighbours and learn about their lives.
- When starting, it can be useful to make a rough site **map** (see Figure 7). After first checking with your host, you could start moving around the village or other area just to get to know it. This is a good way to find out about the demographics of the area and meet more people. In some cases, it may be useful to prepare a letter (surat) that you can give to different households to explain what you're doing there (research, being a student of the community, surveys for conservation, etc.).

Figure 7: A roughly sketched map of part of a village.



- As a researcher you may want to find out certain things (e.g. is this area suitable for ecotourism? How are decisions made in this village?) but you may only get answers by **approaching these questions sideways**. This does not mean deceiving your interlocutors, but exploring different ways of eliciting a relevant answer. For example, you could ask about the village's history and local family genealogies to try and find out about how authority is structured and who the main decision-makers are. In a migrant community it could be interesting to ask how the local landscape compares to their origin area, or other landscapes that they're familiar with, to get a sense of how they view the environment.
- Another strategy is to **follow** specific objects or people as they move between different contexts, e.g. from village to oil palm plantation to forestland to national park. This can give you a better idea of people's livelihoods, relationships to the environment, and how they relate to different contexts. This could give you some ideas about local aspirations and concerns, and how conservation programmes could better address them.
- Consider **documenting** specific aspects of local life, e.g. rice-planting techniques, basketry, rituals, and leaving a photographic and written record for the community (see Figure 8). This can be a good way of creating rapport with other interested villagers. It also can also give you in-depth information on specific topics (e.g. livelihoods, how people demarcate land ownership, rights, etc.) that can then inform conservation interventions. For example, are there certain handicrafts or local specialisms that could be marketed to form a source of income? Might people's seasonal agricultural activities leave gaps at certain times of the year for other activities?
- Pay attention to conversations and activities going on **around you**, not just those that you participate directly in. These can sometimes provide different/additional insights into local life and interaction that you may not be able to access on your own. For example, if you often hear people around you discussing a new law or tax, you could start a conversation about these topics, and find out how the community tends to respond to new regulations or directives (e.g. from conservation or the state).
- Be flexible and **improvise**. If you're offered a chance to do something you were not aware of or expecting, and you feel safe doing so, take it! Follow your research participants' lead. Participant-observation is about learning new things and seizing new opportunities to find out more about people's lives. This may sometimes mean changing your research plans and starting questions to better adapt to local realities.

- **Record** as much as you can. Jot down key words and sentences as you go. Set aside some time every day (if possible) to write notes about what you've seen and done, what you've learned and discussed with others, interesting conversations, and patterns or striking things that you've noticed. Try to record as much detail as possible. Even if something doesn't seem relevant at the time, it may turn out to be significant later on, at which point you'll want to have enough material to work with. In some cases, where it's acceptable and safe to do so, you could use your phone or audio-visual recording devices. As time passes, you may also reflect on how your research questions and activities may or may not be changing, and note new questions that have come up since starting.
- **Anecdotes, stories, chance remarks and jokes** are all valid forms of ethnographic data. Often, these may give you more insight into local concerns and experiences than formal research settings, when people are more guarded and self-conscious. For example, personal anecdotes about encounters with orangutans will reveal much more about how people view orangutans and the forest than pre-set survey questions that record how many times a respondent has seen an orangutan. Many of these fragments of data will only emerge in informal, day-to-day interaction, such as while hanging out at a local food stall, while planting, or while chatting on a verandah. Don't be afraid to record these (ideally after the event) and think of these as important forms of data too.

Figure 8: An ethnographer watching and talking to an elderly lady as she prepares rattan for weaving into a basket.



WHAT SHOULD RESEARCHERS LOOK OUT FOR?

Different researchers will have different interests and focal points. However, there are a few key things that are worth paying attention and recording in most contexts:

- Basic demographic trends: Who lives in a place? Do demographics shift over time (e.g. seasonal migration)? Are there significant generational or gendered patterns?
- How people relate to each other: How do people talk to and behave with each other when they're not interacting directly with you? Are there certain behavioural conventions? How do people deal with disputes, good news, new arrivals, uncertainties and so on?
- What is said, and how: Do people use different styles of speech for different occasions or individuals? Are there different registers of speech? How do different kinds of information travel (e.g. government announcements, news about new economic opportunities)? Who are the most influential/persuasive speakers? How do informal mechanisms (e.g. gossip chains) work?
- What is done: There can sometimes be a significant gap between what people say and what they do. There are also many physical or interactive conventions that are practised but not easily spoken about. Paying attention to people's actions and sometimes unconscious reactions can tell you a lot about local interactions.
- Unusual or unconventional occurrences. Sometimes, things that stand out or don't quite fit can tell us a lot about 'normal' life and expectations in a place. People's responses to these unusual occurrences can also give us clues as to how a community might respond to new ideas or programmes, including those from conservation.

TIPS

- Traditionally, anthropologists worked in a single fieldsite (e.g. a village community) for at least a year, becoming thoroughly immersed in its language, culture, social relations and way of life. However, participant-observation can also be broken down into shorter, regular stints. For example, a researcher could visit a fieldsite every 1-2 months for 1 week at a time, or start with a longer period of fieldwork (1-2 months) and then return for shorter visits. It is best if the same researcher(s) keep returning to the same places, as this builds up familiarity, gives the organisation a recognisable 'face', and may increase local people's interest in and willingness to try out conservation programmes later.
- It can be very useful to learn (at least some of) the local language. It puts research participants at ease, and some things may be expressed better in the local language than in the national or regional lingua franca. Even if you're not able to have complicated conversations, making the effort to engage with it is often appreciated by people as a sign of genuine interest.
- Unlike household surveys or questionnaires, participant-observation does not primarily aim to produce 'objective' knowledge. Rather than trying to quantify certain phenomena (e.g. human-wildlife conflict), participant-observation seeks to understand people's subjective perspectives, feelings, beliefs, experiences and actions. For example, instead of calculating the rate of incidence of human-orangutan conflict in an area, ethnographers might be more interested in discovering why villagers responded they way they did, how they described and accounted for their actions, and what this might tell us about the wider context (e.g. changing attitudes towards wildlife? Concerns about conservation? Generational shifts?).
- Sometimes it helps to deliberately NOT think like a conservationist. Put your conservation-related concerns to one side and focus on understanding people's actions, concerns and experiences, and their everyday lives. This is especially important if you come across practices or issues that contradict conservation goals or values, such as when people hunt or capture endangered species. Instead of rushing to judge, pause to figure out why this has happened, how people view it and what this can tell you about local concerns.

CASE STUDIES

ILLEGAL LOGGING

Researcher A spends a few months living in a village where there have been problems with illegal logging in a newly protected conservation area. When he begins research, he does not immediately talk about logging, but tries to learn about people's livelihoods, the local adat, and rituals related to the environment. He spends time with a few households, helping out with their rice-planting and cash-cropping, interviews the local adat leaders and attends several rituals. On one of his trips into the forest, he attends a ritual in which local place-spirits are given offerings and told about the planned activities of both conservationists and a new mining company, and asked not to disturb these 'guests' in the area - unless, of course, one of the guests misbehaves. On another trip, he meets some men who are cutting down what they still see as their own trees, which they no longer have legal access to. He learns that these men feel frustrated that they, as customary owners, were not fully consulted before the area was protected, and that they see conservationists as taking away their rightful property. As a result of these trips and his interviews with local leaders, Researcher A realises that felling trees is as much a form of protest against the poor behaviour of guests on village land as it is an economic decision. Drawing on his interviews with local adat and ritual leaders, he works with villagers and the conservation organisation to find concrete ways of redressing the villagers' ritual and moral concerns (e.g. through ritual payments) and exploring compensation packages or livelihood alternatives to make up for lost logging opportunities.

A PET ORANGUTAN

Researcher B has been a regular short-term visitor to an upriver village for the last few months. During this time, she has documented local rice-planting activities, participated in rituals and Christian prayer services, and become close friends with some of the local Women's Guild members. On one of her visits she finds that a village acquaintance has shot dead a female orangutan that was eating his fruit and taken her baby. Instead of rushing to report the villager to the authorities, Researcher B spends some time listening to his account of what happened and talking through his options with him. The villager explains that he doesn't like orangutans because of how much damage they cause to his fruit trees, even in comparison to other animals, like gibbons. He thus has little sympathy for orangutans, even babies that have been orphaned, but took it in anyway in case someone wanted to buy it. He knows that keeping and selling orangutans is illegal, and is concerned about possible repercussions. The orangutan is also becoming quite difficult to keep in a box, and he wants to get rid of it quickly. Researcher B is put in an ethical dilemma. In this situation, she takes the chance to tell him about an orangutan rehabilitation centre downriver that could take the orangutan - albeit without payment. The villager vaguely recalls representatives from the centre coming to visit a long time ago. Researcher B also speaks to the villager's wife and other female relations that she's got to know and suggests that the baby may be better off with other orangutans in a rehabilitation centre. Eventually, the villager is persuaded to contact the rehabilitation centre. Researcher B uses her contacts with this centre to arrange for its staff to come and take the orangutan, but with minimal fuss and no punitive measures. This is made possible by the fact that she has become trusted by the villagers and had some influence through her earlier interactions with the women in the village.



#2: Semi-structured interviews

Participant-observation is often complemented by semi-structured interviews with individuals and small groups. Semi-structured interviews are not always suitable for certain situations, e.g. when the researcher is learning practical skills or broaching highly sensitive or risky topics upfront. However, they are especially useful in two ways: for starting conversations and creating relations with specific people; and for obtaining more detailed information about specific topics that are not easy to cover during regular everyday interaction, e.g. village histories, local adat or religious beliefs, local perspectives on certain projects or events.

Semi-structured interviews involve a combination of structure, fluidity and improvisation. Researchers start with a set of questions or topics for discussion, and use these to structure the interview and keep things moving. However, they must also be prepared to go with the flow of the discussion and ‘follow’ their interviewees’ responses. At their best, semi-structured interviews can feel more like engaged conversations, with interviewers and interviewees responding to each other’s thoughts and questions. This responsive method can take interviews in unexpected directions, and reveal insights and new questions that the researcher may not have previously considered. Semi-structured interviews are generally more formal and ‘planned’ than regular participant-observation, although they can sometimes take place spontaneously, out of a casual conversation. It is important, however, that the interviewees consent to being interviewed.

HOW DO YOU DO IT? SOME TECHNIQUES AND IDEAS

- **Get the setting right.** It is important to create an appropriate space for the interview. If there are confidentiality issues, try to meet in a suitably quiet/safe space; if it is likely to involve a lot of detail, make sure that you’ve made enough time for it. This may involve arranging to meet a few times rather than in a big block of time.
- **Preparation is vital**, no matter how well you know the interviewee or how informal you hope the interview will be. It helps to have at least three ‘levels’ of questions ready:

1) *Your own research questions:* What are you trying to find out through this interview? For example, if you are trying to find out about how villagers respond to orangutans’ presence in their farms, you may want to know: When and how often do such interactions occur? How do people view orangutans? Are there gendered or generational differences? and so on. Such questions are not necessarily the ones you’ll ask the interviewee directly, but they can help shape the next two levels of questions and the way you ‘direct’ the interview.

II) *Questions to ask in the interview*: These can be specific or open-ended, or a mixture of both. These are usually less broad than the research questions (above), and should be articulated in a way that makes sense to the interviewee. For example, you could start by asking which crops the interviewee grows, how much time they spend in their farms and gardens, then move into more directed questions, e.g. 'Do you eat most of this yourself?', 'Do you sell a lot of it?'. Avoid deliberately provocative or overly narrow questions like, 'Are orangutans a problem in the area?'. Instead, try more open-ended questions like, 'Has anything affected your harvest in the last few years?'

III) *Prompts and pickups*: These are even more concrete talking points that may encourage interviewees to say more, or nudge the conversation along. These could be simple prompts like 'What do you mean?' or 'I didn't know that!', or simple questions/comments to nudge the conversation along in the desired direction, like 'Are your [fruit] ripe yet?', 'I saw some gibbons in [area] this morning', 'Did you hear about [news item]?', 'What did your spouse/children say [about an event]?'

- There are various ways to **start** an interview. One is to briefly and simply explain what you're interested in, and see if this prompts a response from the interviewee, who may have strong views on the topic that they are eager to share. Another is to start with a simple question to put the interviewee at their ease and get them talking, e.g. 'When did you move to this area?' or 'What do you plant?'. Sometimes it may take a while for interviewees to warm up, in which case a series of small prompts could be useful. Sometimes interviewees will have opinions on everything; others may simply respond to specific questions or won't say very much - such variation is normal!
- During the interview, aim to be an **active listener** - 'listen well'¹². This means paying careful attention to what the interviewee is saying, asking for clarification or more details when appropriate, really thinking about and responding to some of their points, and coming up with new questions on the basis of what they've said. It is fine to bring your own experiences and ideas in as a way of building rapport and keeping the conversation going. But it is important not to talk too much or impose (strong) opinions on the conversation, as these may shut down the interaction. For example, if someone says that they really approve of what an oil palm company has done in the area, ask them to explain why or give you some examples rather than question their judgement or criticise oil palm. Listening to these reasons can tell us a lot about people's hopes, moral understandings, relationships with outsiders, etc.

12 Staddon, S., Byg, A., Chapman, M., Fish, R., Hague, A., & Horgan, K. (2021). The value of listening and listening for values in conservation. *People and Nature*. doi: [10.1002/pan3.10232](https://doi.org/10.1002/pan3.10232)

- Be **ready**, and ready to **improvise**. Keep your prepared questions in the back of your mind as ways of structuring the interview or ways of moving along. You may not be able to cover all of them. If you find that new topics are being introduced by your interviewees, be prepared to listen and ask follow-up questions. These can often give us unexpected but important insights that could not have been anticipated.
- **Ethics:** Make sure that you tell interviewees what you're researching and how you plan to use the material at the start of the interview. You can record their consent in writing, but bear in mind that some interviewees may be illiterate or unwilling to sign forms due to concerns over security. Another option is to record their verbal consent through audio-visual means or make a note in your own records that you obtained their consent. At the end of the interview, remind them again what your research is about and tell them what you're planning to do with the material. If a controversial or sensitive topic comes up during the interview or if the interviewee gets upset, it is worth double-checking to see if it's still OK to keep recording or use that particular bit of material. Remember that interviewees can withdraw their consent at any point, even after the interview has finished.



TIPS

- Always consider how to acknowledge and possibly **compensate** interviewees for taking the time to talk to you. For example, if someone has agreed to speak to you for three hours rather than tending their rice fields or tapping rubber, consider offering appropriate compensation for their time. Seek local advice as to what an appropriate type and level of compensation might be.
- It may be useful to work with a **member of the community** to make contact with specific people and assist with communication. However, be aware of how the identity and social position of the person helping you might influence your interactions.
- Always bear in mind the **context of the interview**. How might the wider environment, other people's presence, your relationship with the interviewee, and so on shape the discussion that you have? For example, your questions - and the tone and formality of those questions - will vary depending on your relationship to the interviewee. If they are a peer with whom you're already friendly, you could keep things fairly open-ended and informal. If you're interviewing someone in a position of authority it may be better to keep things formal and directed. The interviewee's position also matters. A person with a lot of local power or authority, for example, may use an interview to cultivate a particular image or justify their actions to the surrounding people. Or they may prefer to speak privately, without an audience.
- Not everything said in an interview can be **taken at face value**. Always analyze your interview material in its context. Ask yourself: why might this person be saying this to me, or indeed to others around them? Is there a hidden meaning or an underlying motive to what they are saying? What might they be playing up or concealing? For example, interviewees' responses can vary depending on who they're talking to - conservationists, government officials, company representatives, etc. More so than in participant-observation, interviews give people a chance to present certain images and tell certain stories, and it is important to understand these in their context. For example, villagers may emphasise their customary land rights when meeting indigenous rights groups and demonstrate their flexibility and entrepreneurial interests when meeting company representatives. The reality is probably somewhere in between, but these impressions can help them gain different things from different players.
- When carried out with others present or in a **group**, interviews can sometimes turn into conversations, reminiscing sessions, debates or even disputes. Try to avoid causing conflict, e.g. by siding with one person in an argument. However, it can be valuable to follow these interactions as they unfold rather than trying to resume the interview. Discussions within groups are often as or more illuminating than discussions with a single interviewer.
- Interviews can be more **formal** and less candid than everyday interactions, and often only give you access to one point of view rather than several. Also, not everyone will enjoy being or be willing to be interviewed. Not all knowledge or insight can be captured verbally. All this is normal. This is why it's useful to combine interviews with other methods, such as participant-observation.

CASE STUDY

UNDERSTANDING CUSTOMARY LAND ISSUES

Researcher A wants to find out about how customary land rights and models of ownership operate in one village as part of his organisation's plan to design a new forest conservation programme. He arranges to interview an elderly villager, B, who is known for his grasp of local village histories and genealogies (see Figure 9). Some questions that he prepares include: 'Where is your origin village?', 'When did you move to this area?', 'How is land ownership established?', and 'What adat [conventions and rituals] do you have to follow when you clear an area?'.

Researcher A explains to villager B that he is from a conservation organisation and wants to learn more about their customary land use patterns to help them better protect their forests. He begins the interview with the first two questions. B names each 'origin' head-of-household and says who moved to this area, and who moved elsewhere. He adds that those who moved elsewhere, to a neighbouring village, still have some claim through kinship to certain lands in their area. (Researcher A realises that he needs to consult with people in this other village too.) Villager B then names two individuals who, he says, were the head of the group and the ritual chief when their ancestors moved to this site three generations ago. He says, more loudly for the benefit of nearby listeners, that the descendants of these two men (including himself) now need to be consulted if any changes in land use or ownership are being proposed.

At this point, another villager intervenes and disputes his claim. That was in the past, he says, but now it's the government that makes decisions about land use. And anyway, some others add, the descendants of the old ritual head no longer live in the village, having moved to town years ago. Villager B responds angrily that they moved out because the government wasn't giving the village enough development - 'no jobs, no medicine, no clothes!' Researcher A decides to follow this lead and asks Villager B (and the others) to tell him more about their relations with the state. The villagers complain about feeling neglected and excluded from the government's decision-making processes. They say that they are not opposed to a forest protection scheme, which some forestry officials had already mentioned, but that they want to make sure that they benefit from it. In the end, everyone agrees with Villager B that in theory, at least, the descendants of the village's two 'strongest' leaders should be consulted about the fate of its lands. Researcher A brings the interview back to the question of how customary land ownership is established, and the interview continues. However, he has now learned that villagers' responses to any conservation programme will be shaped by their suspicion of the state, their sense of exclusion from decision-making processes, and concerns about local customary (as opposed to official) permissions. For the proposed scheme to get off the ground, the organisation will need to address these grievances and work with members of two villages to identify and design potential forest protection measures.



Figure 9: An interview on local histories with village elders.

#3: Visual or sensory elicitation



There are many things that are not easily verbalised. These include feelings, visual or sensory experiences, and bodily knowledge, such as certain skills or learned behaviours. One important way of learning about these features of life is through participant-observation - for example, by joining the rice harvest or hunting trips, navigating new terrain or waterways, or learning to make nets or traps. Another faster and more focused method is to elicit such insights by asking people to do specific tasks. Like semi-structured interviews, such elicitory methods can help generate more detailed information about certain topics and reveal participants' perspectives, concerns and hopes. They can also be useful means of understanding how people engage with their environment, e.g. when moving through the forest or cultivating their land.

As with interviews, elicitory methods are structured and directed to some extent by the researcher. However, they give participants more flexibility than surveys or questionnaires by allowing them to do as they choose. They can also be less constraining for people who may be uncomfortable with or suspicious of bureaucratic processes like form-filling and interviewing.



HOW DO YOU DO IT? SOME TECHNIQUES AND IDEAS

- Elicitation exercises should have clear instructions, goals, and start and end points. Make sure that you have a clear '**script**' that explains what you'd like participants to do, and give them an idea of what you hope the final product will be - a drawing? a map? a set of descriptions? It can help to have examples of other drawings or audio-visual recordings on hand to guide or inspire people.
- In some exercises, participants are invited to be **commentators**. One example is photo elicitation, in which participants are given one or more photographs (or images) to look at, and asked to comment on them, with or without further questions. This can be a straightforward way of finding out about specific individuals, places or animals, or gauging participants' views of certain things (e.g. species, forests). Such exercises can reveal previously unnoticed details or patterns, such as local marks of ownership in the landscape. They can also elicit stories or reflections that are connected to but not visible in the images. For example, photographs of the same area taken over a period of time can reveal significant changes to the local environment, and spark conversation among participants about the effects of these changes on social life. Finally, the way participants handle certain images can be illuminating. For example, asking them to put images of different species in groups according to their perceived similarities can reveal important things about local classifications of animals (e.g. predator vs prey, clean vs taboo) that are not captured by scientific taxonomies.

- In other exercises, participants are invited to be **creators**. These involve giving participants specific prompts or stimuli and asking them to draw, record or enact what they understand by it. For example, participants may be asked to draw, take photographs of, or create an object collection of what they see as most important to village life, their farming routines, or the forest. These too can reveal things that are socially, morally or aesthetically important that researchers may not have been aware of; they can also serve as a window onto people's hopes and concerns. Another possibility is for such exercises to complement, complicate or even contradict official categories and ideas. For example, a hand-drawn map of the village and its surrounding forest can reveal forms of customary land ownership (e.g. sacred or taboo land) or relations with place-spirits that are not reflected in official maps, but that influence local communities' responses to outsiders.
- Finally, elicitation exercises can involve researcher and participant(s) **doing a specific task together**. This could involve, for example, a day of catching fish or a walk to/around an ancestral village site, with the researcher eliciting reflections and insights from participants and learning new forms of sensory/bodily knowledge along the way. While similar to participant-observation, this exercise is more directed and contained, with the researcher giving more prompts within a shorter space of time, e.g. 'How does this make you feel?', 'What has changed in the last 10 years?', or 'Was there a reason you took this route?'.
- In all cases, be ready to **adapt** to the responses you have elicited. As with semi-structured interviews, elicitation exercises may generate unexpected but important insights into local relations, concerns and relations with the environment.

TIPS

- Because they are relatively **concentrated** and directed, visual or sensory elicitation should ideally be carried out in conjunction with other methods, such as participant-observation and interviews. As with interviews, always consider how to compensate participants for their time and effort.
- Consider how elicitation exercises can be **enjoyable** or **beneficial** for their inhabitants. For example, photographs of local places and events may elicit community histories or stories that can be compiled into a collection for the village, or an exhibition of drawings may be created as part of a series of outreach sessions at the local school.
- Elicitation exercises can be done with individuals or groups. These may involve different **interactive dynamics**: participants in groups, for example, can be encouraged to converse about the exercises and play off each other.
- Elicitation exercises may not be suitable for every situation, and it is important to consider any **ethical or practical problems** they may pose. For example, photographs may contain images of ritual objects that are normally kept concealed, and individuals may be reluctant to map or show a researcher their lands and boundaries in case this leads to land disputes.

CASE STUDIES

MAPPING LAND AND LIFEWAYS

Researcher A has official maps that indicate the extent and boundaries of a proposed village forest. However, she also wants to understand how these relate to customary land ownership and forest rights in the local area. She thus asks a selection of villagers to draw rough maps of their customary lands (see Figure 10), and follows up by walking through these lands with the same individuals. Through these, she discovers the full extent of the villagers' customary land holdings, learns about traditional methods of boundary-making (e.g. by planting certain types of bamboo or following ridges and streams), and realises that the boundaries of the proposed community forest cut through some of the villagers' customary lands. Based on this new knowledge, Researcher A initiates further community research into individual households' customary land holdings, and uses this to design a community-oriented map that more clearly identifies the boundaries of the new community forest with reference to local landmarks and boundaries and named individuals' land.

Figure 10: Villagers draw a map of their ancestral lands.





INVESTIGATING RATTAN DIVERSITY AND SUITABILITY

Researcher B conducts a study on the local uses of rattans. His findings will inform NGO efforts to develop rattan as a sustainable income source. As a first step, he asks several villagers to list freely all rattans growing in the area. The resulting freelists give Researcher B a first impression of how many different rattans exist, what their local names are, and which ones are most commonly used. Second, he asks a knowledgeable villager to go with him to the surrounding gardens and forest to collect specimens of all the rattans listed. This way he learns where rattans grow, whether they are cultivated or grow in the 'wild', and how abundant they are. Third, Researcher B sends the specimens to a local herbarium for scientific identification. Fourth, he asks different women and men to group the collected rattans according to 'kind' (see Figure 11). The sorting exercise shows that not everyone knows all the collected species, and that people sometimes disagree on their names. To solve this problem, Researcher B asks several elders about the rattans and, in agreement with the younger villagers, follows the elders' advice. The sorting exercise, moreover, reveals that women sort the different rattans according to their suitability for plaiting, while the men group according to soil type and diameter size. Through the exercise, Researcher B gets important insight into local uses of rattans, where to find them, and how people classify them. All this gives him a basis to discuss with the villagers which rattans are best suited to be developed as a sustainable income source. At the same time, he is able to equip the NGO project with important environmental knowledge and the awareness that local people's way of seeing and classifying the surrounding flora and fauna often contrasts with scientific taxonomies.

Figure 11: As part of ethnobotanical exercise that seeks to understand indigenous rattan taxonomies, villagers group local rattan species according to 'kind'.

4. Analysis and Reporting

Analysis and reporting are best started concurrently with, rather than after, the collection of ethnographic data. This ensures that your findings can inform the research as it takes place, enabling a much deeper and more robust final analysis. For this to work, people collecting the data will also need to be actively involved in analysis. Sufficient time and resources must therefore be allocated to training, analysis, and reporting both during and after data collection.

Here we offer a couple of introductory tools for effectively handling ethnographic data. First, how do you draw meaningful and useful conclusions? And second, how can you effectively share those findings with local communities, colleagues, managers, and funders?

ANALYSING ETHNOGRAPHIC DATA

The analysis of ethnographic data is a creative task which aims to simultaneously represent existing realities and suggest new connections, comparisons, and interpretations. This is in itself a formidable task, which is made more challenging by the character of ethnographic data. Ethnographic research often results in a large and diverse set of data: collected with different methods, on many different topics, in multiple formats (fieldnotes, interview transcripts, written reflections, pictures), and possibly authored by different researchers. Moreover, the open-ended nature of ethnographic inquiry means that you can't just return to the questions and hypotheses that you started with, but need to let the data drive the questions. So where do we start?

- A useful first step of analysis is going through the data, naming key recurring themes, and **sorting the data** into these themes. This will help you draw **connections** between different parts of the data while also structuring the data for further analysis. Using qualitative data analysis software can be helpful in this process – paid and free options are available online, such as NVIVO and MAXQDA .
- Another basic analytical technique is to explore variation in viewpoints. When, for example, you've identified some key local concepts and concerns, you may want to know whether or not different people understand or use these in the same way. Do these reflect differences in socio-economic positions, gender, or age? Or can differences be explained in another way? How do these differences influence people's interactions with each other?

- It can also be useful for the analysis to **move between scales**, tacking back and forth between general contexts and particular cases. This allows you to trace continuities and discontinuities, revealing similarities and differences. For example, placing village-level observations in the context of regional trends and patterns, may on the one hand help to make sense of what is happening in the village. On the other hand, it could help us better understand these wider contexts. For example, enthusiasm among village youth for Dayak songs from other parts of Borneo make more sense when seen in the context of global indigeneity politics and island-wide efforts at cultural revitalisation. But at the same time, when you notice that the villagers don't understand the lyrics of these songs because they are in a different Dayak language, this can lead you to understand that 'cultural revitalisation' is not just about restoring a pre-existing Dayak community, but also about creating a new, shared cultural identity. To move between scales in your analysis, it can be very helpful to consult existing sources available on a region or issue, such as academic publications, government documents, or project reports.
- Another important analytical tool is to place things in their **historical context**. For this you can draw on other written sources about a region or issue, but also draw on the things you've seen and heard during fieldwork. By looking at historical change, you avoid seeing things as unchanging that are in fact new developments or temporary phenomena. A village economy that today runs mostly on gold mining probably looked very different 20 years ago and will look very different 20 years from now. Tracing developments over time allows you to develop insights about what drives change. Moreover, villagers are themselves usually highly aware of such changes over time, and understanding how their reconstructions of the past and expectations about the future relate to their present way of life can be a key finding.
- Conclusions drawn from ethnographic data can be made more robust and reliable through **triangulation** and **respondent verification**. Triangulation is the process of approaching the same issue from different angles. You might combine different ethnographic methods, such as semi-structured interviews, participant observation, and historical records. You could also go further and use findings from ethnographic research to design focus group discussions or formulate indicators for quantitative data collection. Respondent verification means going back to the people with probable insider insight on your theories and conclusions, to ask for their response and feedback.



REPORTING ETHNOGRAPHIC FINDINGS

You may need to report your ethnographic findings to different parties, for different purposes, and in different formats. Here, we focus on two main potential audiences for your reports: 1) your research participants, and 2) the organisations and funders that you work with.

SHARING FINDINGS WITH YOUR RESEARCH PARTICIPANTS

- As explained in Chapter 2, your research participants may have varying expectations of you and your work. Many communities may be more interested in tangible benefits than in official publications or project reports. However, it is often a good idea to share at least part of your research with your research participants as a way of acknowledging their input and the time they took to work with you. There are a few possibilities:
- One straightforward option is to give your research participants or their representative (e.g. the village head or a community organisation) a copy of the reports that you write. This may sometimes be a condition of allowing you access to the village, and can be evidence that you were genuinely doing research. However, this is not always productive. First, such a report may be written for a very different audience, and may simply be of no interest or benefit to the community. Secondly, a report may contain sensitive or controversial information from within or outside the community that should not be widely shared. It is always important to consider what should and shouldn't be made public, especially if it risks causing conflict within a community.
- To mitigate the above risks, it could be worth producing a more accessible account of your research that can be read by people without specialist knowledge. Try to use simple language, clear examples or case studies, and visual aids such as illustrations and diagrams. Perhaps you could combine a report on your research with specific recommendations that might benefit the community.
- Another option is to figure out during your research what other outputs would benefit your research participants. For example, villagers may be more interested in a collection of oral histories, myths and local place-names, or in a documentary record of specific skills (e.g. weaving, farming techniques). They may also want photographs or audiovisual recordings of specific things or events (see Figure 12). Providing these outputs can be an important way of giving something back to your research participants. However, always consider before making these available whether these might have unintended consequences. For example, will recording one person's narrative of the community's history upset others who may have slightly different versions that assign rights and privileges to different people?



SHARING RESULTS WITH ORGANISATIONS AND FUNDERS

Ethnographic insights (and qualitative data more generally) have conventionally been seen by many conservationists and policy makers as less valuable, legitimate, or reliable than quantitative data. In recent years, however, there has been growing agreement¹³ that qualitative data is indispensable for understanding social aspects of conservation and designing conservation projects that work on the ground. Quantitative data on such common parameters as ‘conservation awareness’, ‘behaviour change’, or ‘levels of participation’ may easily become misleading when they are not based on a thorough understanding of social context. Unfortunately, ethnographic insights often remain, as one conservation manager put it, ‘in the person’s [researcher’s] head’: undocumented, unpublished, and consequently unavailable to others in and beyond the organisation. Here we share some tools for communicating ethnographic insights clearly, accurately and persuasively.

Figure 12: A poster with samples of local varieties of rice created by an ethnographer to present back to the village community.

13 Bennett, N. J., Roth, R., Klain, S. C., Chan, K. M. A., Christie, P., Clark, D. A., ... Wyborn, C. (2017). Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation*, 205, 93–108. doi: 10.1016/j.biocon.2016.10.006

- First, rather than trying to deny the subjectivity and partiality of our insights, we need to **explain the unique nature of ethnographic findings**. This means clarifying that although ethnography produces different kinds of data from quantitative methods, these are as important and valid as quantitative data. This has implications, for example, for how you establish credibility. In quantitative science, credibility often hinges on the use and description of replicable research tools and methods, such as questionnaires and sampling frames, and statistics and predictions generated from these. However, since in ethnographic research the researchers are themselves the primary research instrument, establishing credibility means showing why these particular researchers are well-positioned to address particular subjects - for example, through descriptions of their background, how much time they spent in the field, and what activities they undertook there.
- Throughout your report, it is also important to **distinguish between the researcher's own analysis, and the analysis of the people they've spoken to**. These may coincide but must be kept separate to give credit where it is due. This can also help to avoid confusion, since ethnography often deals with multiple conflicting interpretations of reality. For example, villagers may have multiple ways of talking about what it means to be rich or poor and find it more correct, in certain cases, to speak of people 'with more capacity' or 'less capacity' rather than rich or poor. In such cases, you may still choose to analyse this as a way of speaking about 'poverty', but must also take care to specify that the people you've talked to would not themselves use this term.
- **Evocative descriptions or stories** can be effective ways of bringing a point across. A story is itself part of the ethnographic evidence, but try to back up your point with other descriptions from either direct observation or secondary sources. Make sure to not just recount what happened, but to analyse it and draw out the implications. When using stories, and for any argument you make, **contextualisation is crucial**. Things don't happen in isolation, but as part of multiple intersecting histories from the personal to the global scale. For example, rather than pronouncing a village-level conservation meeting a success based on the number of attendants, try to interpret what the meeting meant for the participants, based on individual motivations, village history, and careful analysis of what was (and wasn't) said.
- Diagrams, figures, pictures, and other **visual material** are good ways to summarize your points and make them easier to grasp. Rather than trying to describe the typical layout of a swidden plot in words, you may include a sketch or diagram that says the same more succinctly. When plotting differences of opinion between different social groups, a table can be useful. And some of the pictures you took during fieldwork can help readers to imagine a particular situation. This is especially important when the readers are funders or decision-makers who have never or rarely visited the field. Such impressions underline the need for conservation to adapt to concrete, specific realities, which may demand out-of-the-box thinking.



APPLYING ETHNOGRAPHIC FINDINGS

A final, important task is to apply ethnographic findings to specific conservation policies and interventions. There are many potential ways¹⁴ of using social scientific methods and knowledge, including ethnography, to contribute to conservation. Here, we follow Sandbrook et al.¹⁵ in highlighting two broad approaches: 1) using ethnography for conservation; and 2) building on ethnographic analyses of conservation.

ETHNOGRAPHY FOR CONSERVATION

This is how ethnographic methods and insights are most commonly used: as instruments for achieving various conservation goals. As suggested in the previous chapters, this can take various forms:

- Building up a body of knowledge about the specific area, community, or situation in which you plan to carry out conservation programmes. This includes crucial information such as local histories, social and political structures and relations, livelihood dynamics, and religious beliefs and practices.
- Designing programmes and outreach around such knowledge, e.g. using local names and taxonomies in surveys, customising sustainable livelihood programmes to fit local livelihood rhythms and priorities, exploring different ways of couching conservation aims through cultural idioms and local concerns, using different media for different communities.
- Avoiding potential misunderstandings, faux pas, or damaging interventions caused by a lack of awareness of local realities, conventions and expectations. Sometimes this means learning when certain programmes, messages or approaches are not appropriate.
- Working through the most appropriate channels, networks and relations. Knowing how decisions are made and information is channelled can be crucial when trying to spread and encourage uptake of conservation messages. But also be aware of who may not be part of these networks and how they could be reached.

14 Bennett, N. J., Roth, R., Klain, S. C., Chan, K. M. A., Christie, P., Clark, D. A., ... Wyborn, C. (2017). Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation*, 205, 93–108. doi: 10.1016/j.biocon.2016.10.006

15 Sandbrook, C., Adams, W. M., Büscher, B., & Vira, B. (2013). Social Research and Biodiversity Conservation. *Conservation Biology*, 27(6), 1487–1490. doi: 10.1111/cobi.12141

- Establishing good relations through conservation research. This could involve, for example, building up networks of contacts in different villages who can be easily contacted when the need arises, working with local people on documentation or small-scale infrastructural projects that benefit them directly, and maintaining a regular local presence rather than ‘parachuting’ in and out. Don’t underestimate the power of simply ‘being there’, and of accumulated goodwill.

ETHNOGRAPHY OF CONSERVATION

- More than simply using ethnographic methods to advance existing conservation aims, conservationists can benefit from ethnographically analysing their own approaches and practices, and thinking seriously about how these might need to change. This doesn’t have to mean undertaking a whole research project on conservation itself. Often, such insights will emerge during ethnographic research and social engagement programmes, e.g. through brief encounters or conversations, through unexpected outcomes of conservation interventions. These should not be treated as extraneous or irrelevant to the research, but as vital findings in themselves. These can also be useful parts of conservation’s own monitoring and evaluation processes. Some possible things to look out for include:
 - How people react to conservation programmes. What can this tell you about their previous encounters with conservation, their perceptions of it, and thus what they expect from conservation? What might you need to incorporate or change in your programme to address these concerns?
 - Which bits of conservation fit the local context, and which don’t? Instead of trying to change the local context to fit conservation, ask: what could conservation change to fit the local context?
 - The structures and personnel of conservation. What works in one context (e.g. an upriver, swidden-focused Dayak village) may not work so well in another (e.g. an urbanising, heavily gender-differentiated Melayu village). Always learn from local experience and contextual knowledge when working out who should do conservation in these areas and how.
 - The ‘afterlives’ of conservation programmes. Whether a programme has succeeded or failed, it is worth monitoring what happens afterwards. Did the behavioural changes, objects/projects (e.g. permaculture, tourism) and so on remain, or did they get dropped or transformed into other things? When figuring out what went right or wrong, it is important to reflect on how your own decisions, assumptions, constraints and other factors may have shaped that outcome. You could also aim to get feedback from the participants involved: how did they feel about the programme, and what effects did it have on their everyday lives and relationships? What could be done differently next time?

CASE STUDY

REPORTING ON MULTIPLE CONCEPTIONS OF POVERTY

Researcher Z was doing fieldwork in an upriver village when the village government organised a series of meetings on a controversial topic. The central government was asking village governments to distribute cash handouts to alleviate the economic impacts of the COVID-19 pandemic. However, since there was not enough money for everyone, the handout was restricted to poor households. But identifying who is poor and who isn't is far from a straightforward matter. Hearing reports of social unrest in other villages, the village government officers decided to engage the community in a process of seeking, and eventually finding, consensus on how to distribute the cash.

Being present during this process, researcher Z attended and kept notes on a number of formal and informal discussions. She suspected that these events could form a valuable case study on how to design fair distributions. Upon return, she went over her notes several times, and was struck by how villagers made multiple and contradictory claims about who did and did not qualify as poor. Sometimes it was said that the entire community was poor, at other times it was asserted that there were zero poor villagers, and in still other moments the wealth of some villagers was contrasted with the poverty of others.

Trying to make sense of these contradictions, she came to the conclusion that there were multiple conceptions of poverty at play. In her report, she thus constructed a typology of the multiple different ways villagers think and speak about poverty. In describing conceptions of poverty, she used her notes of meetings and discussions about the cash handouts, but also drew on other conversations about poverty, and was able to connect these to other relevant experiences from her fieldwork (see figure 13).

This example shows the potential value of being present for unexpected events and taking an interest in them – a central aspect of ethnographic fieldwork. It also shows the importance of putting time and effort in analysis and reporting. A simple description of how a village community reacts to a specific policy may not be of obvious value to conservationists. However, by going over the data, Researcher Z hit upon the question of how to explain certain contradictions in it. This led to a report on multiple local conceptions of poverty which clearly had important implications for conservation work in the region, for example for how to approach benefit-sharing schemes.

Figure 13: An ethnographer sowing rice and vegetable seeds on a newly cleared hillside with her village hosts. Although governments and NGOs often see traditional practices of rice planting as an indicator of poverty, they are an important source of well-being for many practitioners.



Conclusion

We hope that this toolkit equips conservationists, especially those working in Borneo, with useful tips and methods for designing, carrying out and analysing ethnographic research, as well as analysing and communicating such research findings. However, like rural villages, conservation staff and organisations don't exist in isolation. They are part of a larger network of international, national and local governments, funders, organisations and practices. Successful social research and social engagement in conservation will depend on changes that happen across this larger network, not only at the level of conservation organisations' research and practice.

For example, conservation organisations often find it hard to engage in long-term, regular relations with local communities in the areas where they work because of a lack of funding for such routine operations. Funding bodies' own preference for quantitative data over qualitative insights can skew the reporting process, which may in turn make funding recipients reluctant to use ethnographic methods in their work. For long-term, meaningful change to happen, then, funders and conservation managers could also take steps to support conservation social research and engagement on the frontline. To this end, they could more clearly demonstrate their willingness to engage with the inherent complexities and ambiguities of social realities. Report templates should recognise that social impacts are hard to quantify and not always unidirectional. This may help diminish the common discrepancy between what is reported and realities on the ground. Conservation projects should be encouraged to reveal not just their successes but also their flaws and failures, so that donors can work with them on how to improve their engagement with rural communities living next to or within orangutan or other species' habitat.



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Further reading

- Hammersley, M. & Atkinson, P. (2019). *Ethnography: principles in practice*. 4th ed. London: Routledge.
- Hirsch, P. D. & Brosius, J. P. (2013). Navigating complex trade-offs in conservation and development: An integrative framework. *Issues in Interdisciplinary Studies* 31, 99–122. Full text at https://interdisciplinarystudies.org/docs/Vol31_2013/07_Vol_31_pp_99-122.pdf
- Konopinski, N. ed. (2014). *Doing Anthropological Research: a practical guide*. London: Routledge.
- Lähdesmäki, T., Koskinen-Koivisto, E., Čeginskas, V.L.A., Koistinen, A.-K. (eds.) (2020). *Challenges and Solutions in Ethnographic Research: Ethnography with a Twist*. London: Routledge. Full text at <https://library.oapen.org/handle/20.500>
- Moon, K., Blackman, D. A., Adams, V. M., Colvin, R. M., Davila, F., Evans, M. C., Januchowski Hartley, S. R., Bennett, N. J., Dickinson, H., Sandbrook, C., Sherren, K., St. John, F. A. V., Kerkhoff, L., & Wyborn, C. (2019). Expanding the role of social science in conservation through an engagement with philosophy, methodology, and methods. *Methods in Ecology & Evolution*, 10(3), 294–302. <https://doi.org/10.1111/2041-210X.13126>
- Newing, H. (ed.) (2010). *Conducting Research in Conservation: Social Science Methods and Practice*. London and New York: Routledge.
- Russell, D. & Harshberger, C. (2003). *GroundWork for Community-Based Conservation: Strategies for Social Research*. Walnut Creek et al.: AltaMira.



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