



Designing the Project: Why, Who, When, Where and What

There are hundreds of decisions that relate to the design of a land use and occupancy mapping project. Most have to do with nit-picking details. What symbol should I use for the map category of moose? Should 15-year-old males be asked to do map sessions? How do I assign personal identity numbers to participants? How do I indicate the date on audiocassette labels? Should a site be mapped based on a childhood recollection or parental account of it? How do I correct a mistake made when marking data? Do I ask a question about snowshoe hare? Should I map the place a person killed caribou the time he was visiting a relative on another group's territory?

So, where to start?

Fortunately, there are a small number of key decisions that have to be made that help clarify everything else that follows. These have to do with the project's five big defining characteristics, or parameters. They look simple at first glance. They are the why, who, when, where, and what of the research. Many map projects do not think these through carefully enough, leading to problems and unnecessary damage control efforts later on. More than that, not giving due consideration to the defining characteristics can seriously sabotage the quality of your maps. The Big Five are at the heart of research design.

- 1 Why
- 2 Who
- 3 When
- 4 Where
- 5 What



Peter Paul of the Afton First Nation in Nova Scotia strips a piece of birch bark for making a quill basket. Many kinds of trees provide materials for many purposes. Wood from the white birch for instance, is used for firewood, and the bark has been widely used by some indigenous cultures for making things like canoes, eating utensils, baskets, art and tools. The locations of the harvest sites are often mapped.

The process of defining the five research characteristics may take a considerable amount of time, if done well. Ideally, the brainstorming involves the input of the community's political leadership, administration, project staff, active harvesters, and elders.

1 Why

Why are you doing this project?

All five questions are important, but the most critical one is why. Why are you doing this project? What do you want to accomplish with it? What are your objectives? Are you going to use the land use and occupancy maps for curriculum development, co-management negotiations, impact mitigation, negotiation or litigation of rights and title, compensation, or some other purpose? The list could go on for a long time. For instance, you could design an oral history mapping project that focuses entirely on salmon management, or on the rehabilitation of medicine sites, or on traditional travel routes with an eye to developing ecotourism on your territory.

Be careful. The temptation is to list many purposes and then to design a process to achieve them all. This cannot be done, at least not done well. What you end up with is a mishmash of poor quality data that will not meet the requirements of many of your listed purposes, and that will not do the job well for any of them. It is fine to have multiple objectives in mind as long as you have clearly identified one as being primary. That single objective then becomes the focus of the entire project, the reference point around which all other design considerations revolve, including the other four parameters.

2 Who

Who are you going to interview?

Depending on the primary objective and how much time and budget are available, you have to make decisions about how many and which people you are going to interview. In other words, you have to define your study population.

It is often useful to start by breaking down the band or membership list into smaller lists of males and females, by 10-year age groups; for example, men from 30 to 39 years of age, women between 30 and 39, men from 40 to 49, and so on. Rank each of the smaller lists, so that the most experienced and knowledgeable persons in each group are identified, and indicate which elders are at risk because of health reasons. Mark which people are no longer living in the community, and where they currently reside.

Perhaps knowledgeable individuals who are not on the membership list but who are married into the community should be added to the lists. Maybe there are official members who have not set foot on the territory for many years, and should be taken off the lists. Each community is unique, but these are the kinds of considerations that lead to a set of criteria, or rules, that determine the study population. The point is to think it through and have the population defined before starting data collection.

It is impossible to know exactly how many interviews are needed, but it is important to have some idea about the minimum number of sessions required to meet your main objective. Although a large sample is always desirable, it is not always necessary. For instance, under the federal land claims process an aboriginal group would want a line depicting their outer territorial extent of occupancy. This can often be acquired by interviewing a couple of dozen of the older and most wide-ranging resource users. The claimants' survey can be successful with participation of a quarter of their adult population, or even less. However, if the primary objective was to obtain baseline data for purposes of resource management, a much larger sample size would likely be needed. Interviewing a relatively small group of elders who travelled widely over the territory a few decades ago might not yield data useful for making decisions about where younger people harvest resources today.

3 When

When is the period of time for which you want to collect data?

This depends, as do all the parameters, on the purpose of the research. Generally, there are two relevant time frames. One is called recent or “current” use and occupancy. The accepted definition for this is “within living memory” – any time within the person’s life. Some researchers regard this as the period from the person’s teenage years until the date of interview. Others prefer to include childhood recollections as well. A set of current use maps represents the sum of the direct personal experiences of all participants. It can display some information for up to 75 or 80 years prior to the time of survey, but most of the information is more recent because most participants are younger.

The second time frame pertains to historical use and occupancy research, which involves a greater time depth. It results in data that extend farther back than those obtained strictly from within living memory sources. Historical use research uses a combination of oral history and written sources, and documents a community’s occupancy of a territory going back hundreds of years.



Like many elders, Aloysius Benoit of the Miawpukek First Nation, a long-time trapper and sailing schooner captain, possesses an encyclopaedic knowledge of his community’s traditional territory, which includes the area around Conne River, Newfoundland. During his map biography session Aloysius provided firsthand accounts of sites that he had visited more than 60 years prior to the date of his interview. Whenever a “within living memory” use and occupancy study is undertaken, elders are the lynchpin sources of data.



Peter Paul gathers sweetgrass, which is used for purification rituals. Some plant materials are especially important for ceremonial purposes, and First Nations usually document the harvest locations during their use and occupancy mapping studies.

Historical use and occupancy studies use sources that go deeper than the direct life experiences of current generations to help determine the limits of the traditional territory, often for land claims purposes. Current research is usually undertaken to determine the extent and limits of a community's use of territory within recent years. This is important for claims research and, when data are obtained for the whole territory and not just the outer edges of it, current use and occupancy mapping is especially useful for resource management.

In some situations both the historical and within living memory time frames might be inappropriate. Take, for example, a community doing research to assess the impacts of industrial development. It would likely have a different definition for its "when" parameter than the ones used in either historical or current use and occupancy studies. Because of budget constraints, the impact assessment research might focus only on the families most likely to feel the greatest impacts of development. Those would be the families that had been active in the zone of impact in the years immediately preceding the research. It is conceivable that few elders would be interviewed for such a study.

4 Where

Where is your study area?

When you ask somebody to do a map interview, what extent of the earth's surface are you interested in? What is the study area? If the main objective is to obtain data to be used as evidence for proving aboriginal title, the area of relevance would cover the territory defined as traditional by elders, and for which obtainable use and occupancy data could be anticipated.

If the study relates to an Inuit community in Nunavut, the negotiators and lawyers are not interested in the fact that a member once killed ducks with a Delaware acquaintance in the marshes of Walpole Island, near the Canada-United States border. But what if that person harvested ducks with relatives on a neighbouring Inuit community's territory; are those sites to be mapped? What about sites much farther afield, on one of the more distant village's territory? These kinds of questions need to be considered and answered prior to the first interview. Sometimes information that emerges from data collection warrants a rethinking of how the study area was initially defined, and occasionally this results in a slight modification. This also sometimes happens with the who, when, and what (but never with the why) parameters.

5 What

What questions are you going to ask participants?

Any of the five parameters can be difficult to define. Almost always the one that is most time-consuming has to do with what. What kinds of data do you want for your maps? There is a huge range of different kinds of mappable oral history data, or themes, that can be relevant to meeting your primary objective: harvesting areas, habitation sites, travel and trade routes, place names, and so on. It is important to choose a small number of themes, usually no more than two. There are two advantages to being so selective.

- ◆ You can do a thorough job so that the research product is complete enough that subsequent projects can build on it from a position of strength.
- ◆ You can avoid excessive response burden.

If you decide on harvesting sites as a theme, it is necessary to think about who the consumers of the harvests are. Do you want mapped data that represent where people obtained resources that were used to feed themselves and their community, or that were used for sale on commercial markets, or for trade with distant kin, or that ended up in tourists' freezers? Do you want to map a site where a resource is harvested and a portion feeds your community and a portion is sold on international markets? These kinds of considerations need to be resolved carefully. Questions must be framed in a way that allows participants to know exactly what the interviewer is after.

The interview guide, which is the actual list of questions to be asked, is the concrete end product of all the decisions made concerning the "what" parameter. Even a quick look at it can say a lot about a project's chances of success because its length and complexity are related to the way people will likely experience the mapping sessions. The interview guide is where the overly-ambitious project gets into major trouble by generating too much response burden. It is also where the more carefully designed project succeeds. The effective interview guide is carefully constructed and then tested on a few individuals to see if its wording is clear, and to make sure the interviews are not going to be too long and difficult. Some changes might be necessary, after which the guide is finally administered to participants.

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