

Glossary

Accuracy: A measure of the quality of *raw data* or *research product*. An accuracy measure indicates how precisely the location of a mapped *feature* is known.

Archival research: Research involving the types of records held at archives. An archive is a place where unique, original and unpublished materials (diaries, journals, photographs, maps, files, film and sound footage) are kept.

Baseline information or **baseline inventory:** A set of *use* and *occupancy data* used for comparison with other sets of *data*, and against which change over time can be measured.

Co-management: A negotiated arrangement where government or industry agree to jointly manage the resources of the territory with the First Nation.

Community consensus or **consensus:** A broad agreement among community members.

Composite map or **composite:** A map that combines and displays all *data* for a particular group of *interview guide* categories, from the *map biographies* of a specific group of participants. For example, the big game kill sites for all community members, or the plant gathering sites for women over 40 years of age.

Comprehensive research: A research strategy that links a number of key research projects together to produce data which prove that mapped land *use* and *occupancy* information represents living cultural systems, and that the *museum approach* to First Nations' cultural research is not valid.

Consistency: The doing of a given task the same way each time it is done.

Convention: An agreed-on way of doing each of the hundreds of little tasks that, together with the *parameters*, make up the research *methodology*.

Coverage rate: A statistic determined by dividing the number of participants (*participation*) by the number of people in the *study population*.

Culture of research: The community's collective experience and understanding of the benefits and risks of *use* and *occupancy* research, which largely determines community members' willingness to contribute to the kind of long-term research program necessary for self-government.

Current use and occupancy research: A kind of mapping study that documents each participant's *use* and *occupancy* of the territory any time within the participant's life, or *within living memory*. These kinds of studies record the direct life experiences of current generations, and generally go no farther back than 80 years.

Data: See *datum*.

Database: A collection of *data* organized according to a structure that describes the characteristics of the data and the relationships among them. A *GIS* database for instance, includes data about the location and characteristics of *features*.

Dataset: A collection of data that is organized around a common theme, like land *use* and *occupancy* for instance.

Datum: A single fact collected during an *interview*. The plural of datum is *data*.

Diamond or **data diamond:** The mental image to remind interviewers of the importance of obtaining four kinds of information (person, activity, location, time period) for each *feature* mapped during a *map biography interview*.

Digital or **digital data:** *Data* that are directly readable by a computer.

Digitizing: The process of converting *data* marked on a *map biography* into a *digital* form using a computer and *GIS* software. A map is digitized by taping it to a special electronic table, pointing at each feature marked on it with an attached "puck" (a device with a set of crosshairs), and pressing a button.

Feature: A *point* or *line* or *polygon* on a map that represents something in the real world like a moose harvest site or travel route or burial ground.

- Geographical information systems (GIS):** Computer software that deals with mapped information. GIS allow the map *data* to be captured, stored, checked, combined, manipulated, analyzed, displayed on screen, and printed out.
- Global Positioning System (GPS):** A satellite based navigational system that allows points on the earth's surface to be located with a high degree of *accuracy*.
- Ground-truthing:** Verification of the location and *accuracy* of sites mapped during *interviews* by going to the sites with the aid of maps and interview participants, and ideally also with a *global positioning system*.
- Harvest survey:** A key component of *comprehensive research* that provides quantitative measures of the amount of food that a community obtains from its territory over a defined period of time.
- Historical use and occupancy research:** A kind of study that uses a combination of oral history and written sources to document a community's *use* and *occupancy* of the territory. These kinds of studies record information that goes much farther back than the direct life experiences of current generations, usually hundreds of years.
- Informed consent:** The *principle of research design* and data collection that acknowledges that people have the right to know about the nature of the project, why the *data* are needed, and what the anticipated uses of them are, and that people have the right to agree to participate and to subsequently withdraw their participation.
- Integrity of data or data integrity:** The *principle* of research design and data collection that allows you to trace any *datum* found in the *research product* back to its original source among the *raw data*.
- Interim measure:** A negotiated temporary mechanism that gives all *use* and *occupancy* resources, both mapped and unmapped, some level of protection until such time as a management plan giving due consideration to the nation's entire system of cultural resources is in place.
- Interview:** A face to face social interaction that results in a transfer of *data* from a survey participant to the interviewer.
- Interview guide:** The list of questions that an interviewer uses to guide her or his questioning of the participant during an *interview*.
- Key informant:** A participant who verbally provides information to an interviewer during a research project which has a *study population* made up of a small number of only the most knowledgeable individuals.
- Lines:** Geographic *features* that have length but no area (e.g. political boundaries), or *polygon* features that are too narrow for their boundaries to be seen on a map of a given *scale*. See *points*, *polygons*.
- Map biography:** The map or set of maps resulting from a face to face interview during which the individual participant indicates the places he or she has used resources *within living memory*, and in some cases, places that have never been used or visited personally, but about which the participant has knowledge.
- Methodology:** The detailed account of how the *use* and *occupancy data* were collected, which includes a definition of each of the research *parameters* and a detailed description of the hundreds of research *conventions*.
- Museum approach:** Industry and government's typical interpretation of mapped First Nation cultural *features*, which is that they represent isolated remnants of a dead or dying tradition, instead of representing parts of living cultural systems.
- Occupancy:** Refers to the area which, as Dr. Peter Usher puts it, a "particular group regards as its own by virtue of continuing use, habitation, naming, knowledge, and control." The mapping of occupancy records stories and legends about places, ecological knowledge of places, indigenous place names, and habitation sites like cabins and burial grounds.
- Operational planning:** Land use planning that involves the use of large-scale maps, usually 1:20,000 *scale* which shows a lot of detail, to guide on-the-ground operations like logging and the construction of roads.
- Parameters:** The five basic big defining characteristics of the *research design* which have to do with why the research is undertaken, who is to be interviewed (*study population*), what time period data are to be collected for (*within living memory*), what geographic area data are to be collected for (*study area*), and what questions the participants are to be asked (*interview guide*).
- Participation:** The number of individuals from the *study population* that complete *map biography* interviews.
- Points:** Geographic *features* that have no area or length (e.g. mountain peaks), or features that are too small for their boundaries to be seen on a map of a given *scale*. See *lines*, *polygons*.

Polygons: Geographic *features* that cover a land or water area and are large enough to be seen on a map of a given *scale*. Polygons are defined by a *line* or lines that surround an area. See *points, lines*.

Population: See *Study population*.

Principle or research principle: A guideline that helps keep your research design and data collection on track and ensures that you end up with good quality *research product*.

Raw data: The many thousands of individual facts that are obtained during *interviews*, and that are recorded on study participants' *map biography* overlays or maps, and in their interview audio or videocassettes.

Reliability: The quality measure of the *raw data* or *research product* that addresses the question as to whether the same results could be reproduced if somebody else took the same *methodology* and repeated the mapping interviews following that methodology.

Representativeness: The quality measure of *research product* that addresses the question as to whether the map *data* truly represent the *study population* that the maps claim to represent, or in other words, whether the data provided by the participants are characteristic of the population to which the participants belong.

Research design: The strategic plan for a research project that sets out the outline and key features of data collection methodology and analysis, including a detailed consideration of the research *parameters*.

Research product: The concrete end result (such as *composite maps*, reports, and *databases*) of the research in which the *raw data* are organized, summarized and presented in a way that is useful.

Response burden: The study participant's experience of the interview as burdensome.

Scale: To show a portion of the earth's surface on a map, the area must be reduced. Map scale indicates the extent of this reduction. It is expressed as a ratio of distance on the map to distance on the ground. For instance, on a map with a scale of 1:50,000, one hand length on the map represents 50,000 hand lengths on the ground.

Social science: The study of society and social relationships.

Study area: The geographic area for which *use* and *occupancy* data are to be collected.

Study population: The individuals who are eligible to be interviewed.

Themes: The broad categories that are mapped during *use* and *occupancy* research, e.g. harvesting sites, critical animal habitat, site-specific features of special cultural significance, travel routes, and place names.

Transcription: The activity performed by people called transcribers which converts the content of the *interview* audio or videocassette into a transcript, which is a written or typed record of the *raw data* captured on tape.

Translation: The activity performed by people called translators which converts the content of interviews conducted in the indigenous language into French or English.

Triangulation: The process of obtaining a sense of the *accuracy* of a mapped *feature* by comparing where different participants indicated it on their individual *map biographies*.

Use: Refers to activities involving the harvest of traditional resources, things like hunting, trapping, fishing, gathering of medicinal plants and berry picking, and travelling to engage in these kinds of activities. The mapping of use records the locations where these activities occur.

Validity: The quality measure of the *raw data* or *research product* that addresses the question as to whether the data and information mean or signify what you claim they mean or signify.

Verbatim transcript: The typed record of an interview tape's raw data which captures, in exactly the same words, everything the participant and interviewer are heard to say.

Within living memory: The generally accepted time frame for most *use* and *occupancy* studies, which covers any time within the participant's life.

Word processor: Computer software that allows the creation, editing, formatting, and printing of text documents.



The take-home message of this guidebook is very simple. Settle only for good quality land use and occupancy maps. Your nation and your grandchildren deserve nothing less.

This book is for leaders, administrators, and program personnel at the community or First Nation government level, as well as their consultants and external research people, and community researchers who have had experience with similar kinds of studies.

The information and ideas contained here should be especially useful to anyone who has the responsibilities of designing mapping projects and providing guidance to community interviewers.



“We adopted the approach that is outlined in this guidebook, and built an inventory of quality information about our historical uses of Tseil-Waututh territory. The resulting maps and documentation are benefiting our negotiations for co-management of traditional lands, and helping us build the relationships and understanding required for the protection of our Aboriginal title and rights. Our land use maps are thus aiding in the survival and growing strength of our nation, and will benefit future generations.”

Chief Leonard George

Leonard is Chief of the Tseil-Waututh First Nation.

“A key aspect to documenting and substantiating our connection to our traditional territories is proper land use mapping. As an Aboriginal leader, I know that we need accurate and professionally developed maps to use in consultations, negotiations and possibly litigation, in order to protect our Aboriginal title and rights. I therefore encourage anyone interested in carrying out a cultural mapping project within an Aboriginal nation or community, to read this book. Whether we like it or not, the provincial and federal governments have more plans for our traditional territories and if we want to have a say, we need to establish the facts about our land use. Our own maps will be central to those discussions.”

Chief Arthur Manuel

Arthur is Chief of the Neskonlith Indian Band, Chairman of the Shuswap Nation Tribal Council, Spokesperson for the Interior Alliance of Aboriginal Nations, and Co-Chair of the Assembly of First Nations Delgamuukw Implementation Strategic Committee.

“The Supreme Court of Canada, in *Delgamuukw*, said Aboriginal title must be established by evidence of physical and legal occupancy, or tenure. The principal way of establishing physical occupancy is to plot the First Nation’s land use activities on a map. Therefore, it is important for nations and their advisors to know how to do this research and how to do it well. Terry Tobias’ work provides sound guidance in this regard by an individual who is accomplished, credible and experienced in this field.”

David Nahwegahbow, LL.B.

David is a Anishinabe lawyer practising Aboriginal law in Ottawa, and he is also President of the Indigenous Bar Association in Canada.



Union of BC Indian Chiefs



ECOTRUST CANADA

