

Dene Cultural Institute guidelines

The Dene people live in the Canadian Northwest. The DCI (1991) guidelines represent a gender-sensitive, participatory approach for conducting research to document traditional ecological knowledge. The guidelines address intellectual property rights and set the foundation for a cooperative research venture that will be mutually beneficial to the community and to the outside agency. Although these guidelines reflect the needs and aspirations of the Dene people, some aspects are adaptable for other cultural situations. (The DCI guidelines were lightly edited and reformatted for inclusion in this guidebook.)

Guidelines for the conduct of participatory community research to document traditional ecological knowledge for the purpose of environmental assessment and environmental management

1 Establishing cooperative research ventures: the development process

- *Identify the partner community and establish a cooperative research venture* — The first step is to identify the partner community and by consultation develop a joint agreement to carry out the project within parameters acceptable to both the community and the outside agency. This may require several meetings with local government and the community at large, during which the objectives, proposed research methodology, and expected results are thoroughly examined and explained in nontechnical language. Before the signing of an agreement, the community should understand the commitments it would be expected to make and the benefits it could expect to receive. The community should also have the opportunity to add to or to modify the objectives of the research program before it is implemented. Although elected community representatives are the signatories of the cooperative agreement, the approval and support of the general community are essential to the project and should be obtained by consensus, if possible.
- *Establish a community administrative committee to oversee the direction and operation of the project* — Once the project is approved, the outside agency should consult with the local authorities to establish a permanent administrative committee in the community to direct and oversee the operation of the project. The committee members should include representatives from the community, identified by the local authorities, and one representative from the outside agency. The outsider would play only a supportive and advisory role to the committee and would liaise between the community and the outside agency. The responsibilities of the Community Administrative Committee include, inter alia, selecting project personnel, defining the duties and responsibilities of the various actors, project monitoring, and project administration.
- *Obtain approval of workplan and budget from the outside agency and establish a funding agreement and payment schedule* — Once the project's terms of

reference, the various committees, a workplan, the criteria for selecting local and outside researchers, and a budget have been defined, the community should seek final approval from the sponsoring agency. Upon approval, the funds should be deposited in an account in the community. A local person with experience should take responsibility for the project accounting. If there is no one available in the community to carry out this responsibility, training should be provided.

- *Establish an Elders' Council of experts in the topic* — Because most traditional ecological knowledge is provided by the older community members, an Elders' Council would be an important asset for a community research program. This advisory body could provide valuable assistance in the interpretation of language and data, suggestions for areas of research that are important to pursue, and recommendations for the selection of community researchers. An Elders' Council would also help restore the traditional role of elders as community teachers and advisors, respected for their knowledge and wisdom. The Community Administrative Committee, in consultation with the local authorities and other knowledgeable community members, should select the Elders' Council.
- *Select community researchers* — The Community Administrative Committee, in consultation with the Elders' Council, should select the community researchers. One of the most important criteria in the selection of community researchers is the ability to communicate well in the local language and the outsider language. Without these skills, the work cannot be done effectively. The alternatives are to have an intensive language(s) training program for researchers, which may be too costly for individual projects, or to have a qualified interpreter work with the community researchers. Other important qualities are awareness of local traditional culture, previous research experience, interest, and motivation. On nearly all broad subjects of research, there will be some perspectives and knowledge that are generally held by women and some that are generally held by men. A mixed-gender research team presents an opportunity for discussing and dealing directly with gender issues and will help the team access all perspectives. If gender is an issue in the interviewing of some older men and women, it may be advisable to let the researchers of the same sex work with these individuals. It must also be recognized that the rapport established between the interviewer and the interviewee depends on many social and interpersonal factors that are unrelated to gender (for example, kinship and personality). The payment of community researchers and their work schedule (part time or full time) should be decided on by the Community Administrative Committee.
- *Select outside researchers* — The Community Administrative Committee should select any outside researchers the committee members feel would benefit the project. Outside researchers should offer advice and support to the community and to the local researchers. They should not be responsible for directing the research. Depending on the nature of the project and the experience of the

community researchers, the outside researchers may be required to provide local training. In addition to their academic qualifications, it would help if the outside researchers had some previous hands-on experience living with the culture they will be working with and are prepared to participate in community life as much as possible during their stay. Although both outside and local researchers bring their own cultural biases and personal interests to any project, the credibility of the outside researchers will be enhanced if they are not perceived by the community as being closely aligned with government or nongovernment agencies, whose interests may be in conflict with those of the community. Outside researchers should remain in close contact with the local researchers throughout the project to provide them with guidance and feedback.

- *Select a technical advisory committee* — Where possible, a pool of resource people should be available to provide advice and feedback to the research team. Such an advisory committee should consist of professionals who are not aligned with the outside agency and who have extensive, relevant experience working in the different areas covered in the research (for example, a biologist, a social scientist, a linguist, individuals with previous experience in participatory community research or community development). These professionals would be called on to assist in the design of the research methodology and to provide help in the analysis and review of the final draft of the report.
- *Begin training program* — Community researchers in most cases will require some training to conduct the research. The type of training program provided to community researchers will depend on the type of project carried out, the individuals involved, and the time and money available to run it. For example, community researchers can be trained in interview techniques, questionnaire design, sampling, and data analysis. Any training program for doing research on traditional environmental knowledge should provide a good balance of field and classroom activities. Ideally, all or at least part of this training should take place in a field-camp setting and should include elders from the community, as instructors, as well as different scientists. This cross-cultural, interdisciplinary approach would permit local researchers to observe first hand the ecological topics under study, both from a Western scientific perspective and from an Aboriginal perspective. At the same time, scientists would have the opportunity to learn about traditional knowledge. A field-camp setting would also allow participants, away from the distractions of everyday community life, to concentrate on learning. Depending on the language fluency of community researchers, there might also be a need for intensive language instruction for both the community and the outside researcher. An important addition to any training program would be a basic linguistic component. This would help both the local and outside researchers understand and learn how to cope with the complexities of translation.
- *Select participants* — The Community Administrative Committee and the Elders' Council, in consultation with the local researchers, should select the participants. It is important to interview a wide range of participants to ensure that different

perspectives are represented. The specific number of people to interview will depend on the availability of participants, the time frame of the project, and the information collected. The researchers can assume that they have sampled the range of information available when they stop seeing significant differences in responses. Although elders may be recognized as the most knowledgeable interviewees, it is worthwhile talking to middle-aged and young people (as well as rich and poor people). Also, it is important to interview both genders. Even if the research is focused on a technology used mainly by one gender, the other gender may still be very knowledgeable. They have heard the same stories and legends and have listened to discussions about these activities throughout their lives. One gender may also have specialized information. Often within a community, different individuals will be recognized as being particularly knowledgeable about certain geographical areas or particular species. The Community Administrative Committee and the Elders' Council should decide how to pay the participants. Payment may be in the form of gifts or money. Informants can be paid an hourly wage for each interview, with a maximum amount for a whole day spent out on the land.

Traditional-knowledge research is a new and rapidly evolving field. There is no one correct method for data collection. Every project will have different objectives and limitations; hence, the methodology will have to be modified to suit individual needs. The key to successful research is to remain flexible and innovative in your study and to be sensitive to the needs and lifestyle of the community you are serving.

2 Developing the research methodology: retrieval and documentation of traditional ecological knowledge

- *Participant observation* — The ideal method for documenting and understanding traditional knowledge is participant observation, whereby a local researcher and a scientist work together as a team to interview informants in as natural a setting as possible (for example, while participating in relevant activities). The traditional activity, combined with the natural environment, provide a natural stimulus for discussion and learning for the scientist, the local researcher, and the informant. However, few projects have the time or the financial resources to use participant observation exclusively. Usually, the primary method of data collection is the ethnographic interview that uses a structured conversational approach; this should be supplemented by participant observation whenever possible.
- *Ethnographic interviews and structured and unstructured interviewing* — Given that community researchers are experienced or have received special training related to the project, the methods of questioning participants will vary among local researchers and the participants themselves. In some cases, the structured questionnaire, with its direct question and answer format, may be effective. In other instances, a more casual conversational approach may be most suitable. Some people require a lot of encouragement before they will talk. Others tend to wander off on subjects that may be irrelevant to the question, although saying what appears to be irrelevant may in fact be their way of answering the question

(for example, through a story or legend). A lot depends on the interviewer's ability to sense when it is important to probe for more information or gently steer the conversation back on track. The more knowledgeable the interviewer is about the subject matter and the culture's way of expressing ideas, the more effective will be the interview.

- *Framing the questions* — Questions to obtain data that are important from a scientific perspective must be framed in culturally appropriate terms. Generally, it's better to avoid the use of scientific terms in questions, because they are often difficult to translate into the local language. There are also scientific concepts that, when translated, elicit a negative or confused response because they are culturally inappropriate ways of asking for that type of information. For example, the modern concept of wildlife management suggests the control of a species by humans. The idea of humans controlling the environment is considered by some indigenous groups to be an interference with the natural order, which from their cultural perspective is unacceptable. Another example is asking about the number of animals harvested. Some participants may be hesitant to reveal this type of information for fear that it might be used against them by the government. For others, talking about the number of harvested animals may be considered boasting. In both of these cases, local researchers can help design culturally appropriate questions.
- *Group, pair, and individual interviews* — Depending on the objective of the interview, either group, pair, or individual interviews may be used. Individual interviews allow the more reserved person to speak freely. On the other hand, some people may feel uncertain about the knowledge they have and be more at ease discussing their ideas in a group situation. In group interviews, unless the interviewer is very skilled at facilitating a group discussion, one or two people tend to dominate the interview, or the group breaks into smaller discussion groups. Group interviews are probably most useful for trying to get a consensus on a particular subject if there appears to be a wide range of opinions among respondents. Pair interviews are good because one person may help to jog the other's memory about a particular event or clarify a point. Often a husband and wife make a good team in this respect.
- *Recording the interview* — Wherever possible, all interviews should be recorded on (audio) tape. However, permission to tape-record must be given by the participant before the interview. Tape-recording allows the interviewer to concentrate on the questioning and to encourage the participant. However, not everyone may agree to be tape-recorded, in which case it may be better to have two people participate in the interview, one to ask the questions and the other to take notes. Even if the interview is being tape-recorded, it is always a good idea for the interviewer to take a few notes to clarify certain points at the end of the interview. Where applicable, some data should be recorded on maps of appropriate scale. Having a map of the area present during the interview may also help stimulate a participant to talk about a particular geographical area or species.

3 Conducting the interview

- *The setting of the interview* — Researchers should conduct interviews in places where the participant is most comfortable.
- *Preliminary interview* — Interviews should be preceded by a brief, informal discussion with the participant(s) to outline the purpose of the interview, to indicate the type of information sought, and to set the time and location of the formal interview. If a general policy regarding the control and use of the project data has not been established by the Community Administrative Committee, participants should be informed of their right to decide how the information from their interviews should be used. All participants should be required to sign a release form at the beginning of each interview. The release form should indicate who should have access to the information, beyond the use of the specific project (for example, the general public, only community members), and when they can have access to the information (for example, now, in 10 years, or when the informant is deceased).
- *Conducting the interview* — The most important step in conducting an interview is to put the participant at ease. (Local researchers in northern Canada have found that often the best approach is to begin the interview by having tea together.) During the interview, the interviewer should avoid asking leading questions and citing the names of persons who have provided contradictory opinions. The interviewer must make an effort to show interest in the conversation through eye contact and other responses. The interviewer should be sensitive to signs of fatigue, and if this becomes apparent, arrange to stop the interview and continue at another time. Most interviews should not last more than 2 hours.
- *Transcription and translation of interviews* — Transcribing and translating tapes are very time consuming. Community researchers should transcribe the tapes verbatim into the Aboriginal language as soon as the interview is completed. This way, the information is still fresh in their minds, and if there are any problems of interpretation the researcher can easily return to the participant to clarify points. This routine also prevents a backlog of tapes needing transcription. If the interviews are to be translated, community and outside researchers should work together to translate at least one interview per topic early on in the interviewing process to ensure that any problems of translation are resolved before the work gets too far along. It is important to fully understand the Aboriginal terms and concepts to ensure that the meaning is not lost or distorted in the translation. Once the transcriptions and translations of interviews are completed, community researchers should go over the contents with the participants to ensure correct interpretation. If there are major differences in responses among the participants about a particular subject, a meeting of the Elders' Council should be held to discuss the issue.
- *Analysis, organization, and management of data* — It is difficult to recommend a particular method of data analysis and management because each project will

have specific objectives and methods of documentation. A few suggestions for analyzing and managing data that should have general application to other research on traditional ecological knowledge are offered. Information on traditional ecological knowledge for use by government administrators and the scientific community usually needs to be put into technical or scientific language to make it more meaningful and useful to these outside users. It is therefore advisable for the outside researcher to review the verbatim (translated) transcripts and to reinterpret and rewrite the data in appropriate language. The data are then analyzed and evaluated for completeness and relevance to the research objectives. Wherever possible, information from transcripts should be mapped. The base map will highlight information gaps and may identify potential conflicts.

- *Organization and storage of data* — Most traditional-knowledge information is presented in anecdotal form and is therefore difficult to classify and analyze. Often people will discuss several different subjects in answer to one question. Information can be classified according to different subjects and then summarized in nontechnical language.
- *Dissemination of information* — For the duration of the project, the Community Administrative Committee, the outside agency, and the community as a whole should be kept informed of the progress and of any major problems that arise. For the Community Administrative Committee and the outside agency, brief oral and written reports, supplemented with mapped and other graphic data, should suffice. Similar information may be presented to the community by talking about the project on the local radio or by holding an open house whereby the community can drop by the project office to talk with local and outside researchers. It is important to take photographs for displays and public presentations. Progress reports and a summary of the final report should be translated into the local language and distributed widely, through, for instance, a community newsletter. Depending on the nature of the project and the availability of funds, it might also be useful to produce a video of the work. This would be useful for public education, for school curriculum, and for professional presentations. In the preparation of the final report, each of the participating groups should have input into its design and content before it is finalized (that is, the Community Administrative Committee, the Elders' Council, the Technical Advisory Committee, and the local and outside researchers). A draft report should be distributed to the agency and other individuals for comment. Once the report is finalized, a community meeting should be held to present the final results of the project. Copies of the final report should be sent to the community, the sponsoring agency, and appropriate others for future reference.