USING QUALITATIVE DATA COLLECTION METHODS WHEN PLANNING FOR COMMUNITY FORESTS

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Abstract. When gathering information and planning for community forest policies and programs, planners, municipal foresters, and arborists can find it difficult to identify, involve, and listen to all persons important and affected. Accordingly, the concerns, beliefs, attitudes, and behaviors of some people continue to be misstated, unknown, and ignored. Furthermore, some people continue to be excluded in information gathering and planning either by design or lack of effort, which can lead to poor information and planning, increased conflict and cost of conflict, poor collaboration, and increased mistrust and apathy. Use of key informant interviews, focus groups, and visual techniques such as stakeholder mapping, vision galleries, and sacred place mapping can help planners, municipal foresters, and arborists to better develop mail and telephone surveys. These methods can also be used to gather information about people's opinions and attitudes, help identify and include both insiders and outsiders in the community forest planning process, and help reduce conflict.

Key Words. Key informant interviews; focus groups; stakeholder mapping; vision galleries; sacred place mapping; conflict resolution; collaboration; planning; community forestry.

People working on community forestry projects and plans, from large-scale tree plantings to complex plans guiding programs and developments, have access to a number of information-gathering tools. Mail surveys that follow a prescribed method, such as Dillman's Total Design Method (2000), can be used to gather information about people's attitudes, knowledge, and behavior. Responses to mail surveys, and surveys in general, can be increased with repeated contact by a reputable organization such as a university or munici-

pality, a well-designed and attractive questionnaire, and questions that deal with issues or topics considered important. Telephone surveys can be expensive because of labor and phone time. As with mail surveys, a well-designed telephone questionnaire should be used by people trained in phone survey techniques. A random survey of people visiting public buildings and using public facilities can be completed with short, well-constructed questionnaires. In addition, a number of more participatory survey methods, such as key informants and focus groups, can be used.

Even with good survey tools and instruments, it can be difficult to identify and involve both insiders (traditional participants) and outsiders (nontraditional participants) in information gathering and planning surrounding the community forest. This difficulty reflects four issues: 1) the fact that mail and telephone survey response rates have fallen; 2) a tightly held trust in "myths" and *a priori* assumptions by planners, managers, and other decision makers about people we know relatively little about (Luloff et al. 1993; Jones et al. 1995); 3) the absence, by design or lack of effort, of current and/or long-term contact with certain people, which frequently leads to distrust, misunderstanding, and planning and managing by anecdote; and 4) a lack of education in, familiarity with, and adoption of techniques to help overcome these problems. Here, we discuss the importance of using nonlinear and nonwritten information-gathering techniques to interact with people. As will be shown, key informant interviews, focus groups, and visual techniques such as stakeholder mapping, vision galleries, and sacred place mapping are quali-

tative techniques that can be used by planners, municipal foresters, and others both to help include people and provide timely information on the attitudes and behaviors of a variety of people.

WHY CONSIDER QUALITATIVE METHODS?
To Reduce Conflict

Effective communication processes are characterized by empowering people to communicate and by inclusive and two-way communications, which include listening to participants. These principles are essential when planning for the increased conflicts, costs, and opportunities associated with the community forest. Today, constructive approaches for understanding and confronting difficult environmental and social problems are required. The pace of development of new problems is rapid, which is a symptom of the turbulence of our social environments and changing landscapes (Gray 1989). Many times, municipal foresters and arborists are involved in personnel policies, development projects, community tree plans, controversial tree removals, large-scale tree plantings, and other situations and issues involving multiple parties. When this occurs, it is important in reducing conflict that all parties are given input, that all parties understand the decision-making process, that all parties understand each other, and that decision makers understand the unique appreciation that each person has for a particular problem or opportunity (Gray 1989).

One obvious benefit of including and communicating with a wide variety of people in information gathering and planning is that the responses of such people help provide better, more realistic management objectives, which can lead to less conflict (Gray 1989). Further, better recognition, respect, and support are fostered from the onset of an information-gathering and planning process. It is known by planners and sociologists that if power is given to people, the initiative for a policy, program, or project comes from the people, resulting in a strong sense of ownership through the identification of options, solutions, and strategies. The result of good communication

is improved relationships and reduced conflict between participants and organizations or groups.

Although proper communication with people requires higher initial costs, results can reduce expenses associated with enforcement of policies and/or mitigation of conflict early in the planning process, rather than later in the implementation and management stages (Gray 1989; Shaw and Johnson 1990). Apathy toward and alienation from agencies and democratic institutions can be better overcome with the right messages that are framed by a wide variety of people. Municipal foresters and others who choose through qualitative tools to facilitate good communication, and thus enable a wide variety of people, help increase and maintain people's interactions. This intricate agency work is more likely to lead to outcomes acceptable to all parties, and thus, aid in the management of conflict (Wilkinson 1991)

To Promote Collaboration

Collaboration has been described as, "... when a group of people constructively explore their differences and search for solutions past their own limited vision" (Gray 1989). It implies interdependence and is a process that turns adversarial interaction into a mutual search for solutions that allow all interests to be represented (Table 1). When the interests of multiple parties are intertwined, such as in planning for open-space conservation or large-scale tree removals and plantings, working with people to break existing barriers of apathy, distrust, and misunderstanding is important (Fisher et al. 1998). A better understanding of differences promotes the development of trust and a shared vision, which is necessary for collaboration. The information-gathering tools discussed in this paper can help promote collaboration by bringing people together in focus groups and sacred place planning processes to share information; these tools also provide a chance for greater understanding of the issues belonging to all of the involved parties. Toward this end, information gathering can act as an inclusive

Table 1. Situations in which collaboration is needed to solve a problem (adapted from Gray 1989).

Problem is ill defined, or there is disagreement between people about how it should be defined.
Problem is characterized by technical complexity and scientific uncertainty.
Differing perspectives on the problem often lead to adversarial relationships among people.
Several people have a vested interest in the problem and are independent.
People have different levels of expertise and different access to information about the problem.
Independent or unilateral efforts to deal with the problem typically produce less than satisfactory solutions.

and communicative effort that builds collaboration and reduces conflict between individuals and organizations (Carpenter and Kennedy 1988).

To Better Understand Local Places

Some people believe that mail and telephone surveys, when developed alone and representing top-down models of information gathering, impose an *a priori* definition upon local residents that divorces their answers from the sociocultural milieu in which they are developed (Jacob and Luloff 1997). It is thought that by using survey instruments not grounded in the reality of an individual locality, an attempt is being made to comprehend the individual's sense of place, which is formed from a broad-based awareness of an area and its attributes, without understanding the distinct local realities of a place or issue. If no effort is made to understand the local realities of a place or issue before constructing written or telephone surveys, an assumption is made by the information gatherer about a deficit in the residents' knowledge and understanding of the place they live, and expert local knowledge is ignored and replaced by what the information gatherer thinks is important (Lipman and Harris 1998). The effectiveness of understanding people's attitudes, values, and behaviors is contingent on the local social and cultural contexts in which people live. In many cases, inclusionary forms of dialogue, such as key informant interviews, should be used to help create mail and other survey instruments. These methods work to identify and include people who are experts about the realities and issues of their community.

To Better Include Outsiders

Outsiders (nontraditional participants) have been defined as women; members of various racial and ethnic groups; religious groups; youth and young people; elderly people; ill people; blind, deaf, and disabled people; foreign-born people; illiterate people; prisoners; and mentally ill people (Bailey 1994; Iles 1998). Other people often excluded are those not in the "mainstream" and who resist inclusion or are hard to identify or locate. These groups include stigmatized people and traumatized people who may be ashamed about their behavior, or what happened to them, or angry about certain outcomes (Bailey 1994). Many different groups are excluded from information-gathering and planning efforts either by design or because there is no effort made to understand their views and include them. The lack of communication with and exclusion of certain people, by accident or on purpose, leads not only to poor information and incomplete community forestry plans and programs but also to a lack of trust in the system and to apathy and quiescence (Gaventa 1980; Luloff and Swanson 1995). People interested in identifying and communicating with those persons overlooked in information gathering and planning should recognize that such people often have unique social and economic characteristics. For example, they have different educational and knowledge levels, different cultural and social perceptions, different resource and power realities, different mobilization realities, and access to different communication technologies (Bailey 1994). Not surprisingly, these same characteristics contrib-

ute to such people's under-representation in the information-gathering process. Although including outsiders is encouraged, attempts to contact non-traditional participants can be frustrating, time-consuming, and expensive, and can require extra planning, effort, time, and money (Bailey 1994). However, key informant interviews and focus groups can provide tools that enable increased and more accurate communication with outsiders and their organizations.

Response Rates Falling

Despite the step-by-step, theoretically based method for mail and telephone surveys provided in the Total Design Method (Dillman 2000), current research demonstrates that mail and telephone survey response rates have begun to fall (Bailey 1994; Willits and Luloff 1995; Groves and Couper 1998; Dillman 2000). Response rates of less than 50% for mail surveys are common (Nachmias and Nachmias 1987; Bailey 1994) and have been reported for telephone surveys since the mid-1980s (Dillman 1992). Groves and Couper (1998) suggested that increased nonresponse rates were primarily attributable to refusals rather than to inability to contact people by mail or telephone. For instance, the ability to screen telephone calls using answering machines or caller identification has increased the ability of respondents to refuse telephone interviews. Several explanations have been offered for increased overall refusal rates, including the increasing prevalence of public opinion polls and marketing surveys, fear of crime, decreasing availability of discretionary time, and privacy-related concerns (Groves and Couper 1998). Few municipal foresters or arborists use proactive methods of gathering information from the public, although they may use mail or telephone surveys. As a preliminary step, qualitative methods can be used to increase the relevance, quality, and attractiveness of mail and telephone surveys. They also can be used alone as information-gathering tools for community tree plans, tree removal programs, and other work.

TWO QUALITATIVE METHODS
Key Informant Interviews

Although telephone and key informant interviews are somewhat related, key informant interviews have higher response rates, are not terminated early, and provide more complete answers to open-ended questions (Bailey 1994). From inception, phone and mail surveys have relied on verbatim responses to closed-coded questions. Key informant interviews can provide rich and spontaneous replies to open-ended questions, as well as personal interaction. Simply put, such interviews can provide a better view of the social reality of a person, his or her place, and interactions.

Key informants are spokespeople who, because of their participation in and knowledge of an area, are asked to describe events, actions, and beliefs, as well as their attitudes about them (Luloff et al. 1995; Jacob et al. 1997). Key informants are identified on the basis of their organizational and community positions, reputations, knowledge of the issues under study, or the fact that they are individuals described by others as "knowing a lot about this place or thing." Their insights, recollections, and experiences provide an important and logical starting point for the compilation of data about the social reality of a person, place, program, or issue.

Selection of key informants to provide information about the development of a community tree plan, a tree removal program, a tree pruning program, or other activity can be accomplished by the use of a modified "snowball" procedure. First, a small number of initial key informants are identified using the following groups for guidance: 1) senior local government staff, 2) senior local elected officials, 3) state agency representatives, 4) industry or local business representatives, 5) local environmental organization leaders, 6) teachers and other educators, 7) leaders of minority or ethnic groups, 8) leaders of groups that represent opposing interests, 9) representatives from religious institutions, and 10) the media. Depending on the issue, youth, such as high-school students, also should be key informants and take part in interviews.

Individuals to act as informants in the general groups can be identified on the basis of stakeholder mapping, directories, advice from people familiar with the area, and/or through informal conversations with local residents. More informants continue to be added during interviews based on the advice of those being interviewed until redundant information is collected and you are reasonably certain that a fairly comprehensive account of the issues and problems has been compiled.

In key informant interviews, we suggest using a structured, face-to-face interview. A formal interview schedule is designed and used both to order the basic questions to be asked and ensure that the same questions about who, what, when, why, and how are used across interviews. In addition, the interviewer should have the skills to gain the trust of interviewees and to elicit detailed responses. Key informant interviews can be tape-recorded to ensure accuracy of information. If they are recorded, the tapes can be transcribed for analyses through a variety of content analysis techniques (Straus and Corbin 1990; Lofland and Lofland 1995). The increased availability of ethnographic software, such as NUDIST, HyperRESEARCH, and SPSSTextSmart, has somewhat facilitated content analysis. However, these computer-based methods are incomplete because they cannot identify and categorize complex thoughts.

The following is a short example of content analysis of the open-ended question, "What does the term 'open space' mean to you?" In reply, 61 people commented no development, no structures, left in a natural state; 45 answered agriculture, farms, fields; 41 answered forested areas; 30 answered city parks; 19 answered public access, free access, common space; 9 answered small city places; 7 answered streams; 5 answered golf courses; 2 answered conservation subdivisions; and 1 answered a land-use planning category. At least three things are important in these replies: 1) respondents have a reasonable and diverse understanding of the term

"open space" without being provided a list of definitions to choose from; 2) both agricultural and natural areas are important open space; and 3) the comments regarding public access and common space (which are not provided in agricultural open spaces) added a new dimension to the term and to future written survey questions.

As previous studies have shown (Krannich and Humphrey 1983; Bourke and Luloff 1995), key informant interviews are useful tool for gathering information about local places, problems, and issues. For studies of statistical significance, however, perspectives of a much broader range of community residents must be considered. Hence, key informant surveys can be used both by themselves to gather general information and to provide a logical basis for the development of more practical, locally oriented, and detailed questionnaires for more specific analyses of those individuals and issues of central interest.

Focus Groups

Another way to gather diverse information is through focus groups. Focus groups are a means of collecting in-depth information about a small group of topics. Trees, forests, and management practices are difficult to describe in short sentences or multiple-choice questions. A municipal forester having difficulty with conflict surrounding tree pruning practices or the development of a new management plan can use focus groups to gather information and communicate with concerned people. As the name suggests, a focus group is an informal discussion in which 8 to 10 people brainstorm and talk about a topic in their own terms with guidance from a skilled moderator. There is skepticism about focus groups; however, most concerns are largely related to representativeness, generalizability, sample size, and the fact they do not accommodate tests of statistical significance. Regardless, focus groups can be used to help determine the salience of particular topics to a target population, understand the language that people use to comprehend and de-

scribe some phenomenon, translate theoretical concepts into understandable survey questions, and provide valuable information for more harmonious decision making.

Issues when using focus groups. Many books describe how to conduct focus groups (Morgan 1997; Greenbaum 1998;). Picking group members is usually cited as the most serious drawback of focus group research. Critics argue that focus group results are not generalizable to a larger group of people. In our opinion, this criticism misses an important point in using focus groups. When you conduct focus groups, the intent is to gather in-depth information about a particular topic from people who have similarities in place and the issues involved in that place. Therefore, the nature of the issue under study dictates which participants you choose. Strictly speaking, the results of focus groups aimed at a locality of interest are not generalizable beyond a particular place and group of people.

As described later, stakeholder mapping can be used to identify people who should be included in groups discussing certain issues or topics. Perhaps the best rule of thumb to use when deciding how many groups are needed is to continue to collect information until it becomes redundant. When that happens, you have a reasonably clear indication that you have spent enough time with focus groups collecting data. In our experience, when you are dealing with a fairly homogenous population, the flow of new information begins to slow substantially after four or five groups, especially if you carefully define the topic and do not let discussions wander. Of course, if the population under study is culturally or ethnically diverse, you may want to conduct many focus groups in a region.

Lastly, who should conduct focus groups? Even in the simplest of groups, there are complex issues of getting people in touch with their real feelings and with each other, creating an atmosphere that allows people to express themselves honestly, resolving conflict, sorting out the relative importance of the overwhelming amount of information that arises, and dealing with insights, ideas, and agendas that are not on a discussion guide. Some participants dominate conversation, some are shy about expressing their feelings, some exhibit new and historic grudges and power relations, and so forth. Problems such as these can be difficult to address. For these reasons, it is best to enlist the services of a trained moderator familiar with the latest techniques and interventions. Using a neutral moderator from outside the issue helps avoid bias, or the perception of bias, that occurs when a person or agency with a vested interest conducts a focus group. A professional moderator can assure participants that he or she has no personal interest in the results of the discussion, that group members should feel free to express themselves honestly, and that their comments will be used by, or at least passed on to, decision makers.

Using focus groups in a different way. An alternate use of focus groups that is increasingly popular involves questionnaire followup. Instead of using focus group results only to develop a written or phone survey, focus groups are conducted to help interpret survey results. This strategy allows you to tap levels of meaning that are impossible to access through the close-ended questions typical of most mail and telephone surveys. This strategy was used in a study of landowners living in one of Pennsylvania's urban–rural interfaces. After we conducted a written survey of landowner views of forest stewardship, we decided that additional clarity was needed, especially for such frequently used phrases as "caring" for land and "stewardship." To determine what these phrases meant to landowners, two focus group sessions, each consisting of eight landowners, were conducted. Each session was videotaped for future analysis.

As we analyzed the focus group discussions, we learned more about the sincerity and intensity of feelings of landowners and the meanings

they assigned to terms generated through re-sponses to our mail survey. The four examples below provide a sense of how focus groups can enrich written survey findings. When discussing the concept of "caring" for their land, one of the participants offered the following interpretation: "My opinion about my land is that I'm just a temporary resident on it. To tell the truth, I'll be gone some day and it will be someone else's. I want to take good care of it. What I consider to be good care of it. That is, be a wise manager." (Egan et al. 1995). To this participant, "caring" implied being a wise manager. Another partici-pant described "caring" in similar terms: "What it means to me is, I got kids and I'm hoping that the land will look a little better when they're using the land. As Bill said, proper use of the land for the long-term" (Egan et al. 1995). The term "stewardship" is described by another individual: "Stewardship has a connotation of care and utili-zation, not just preservation.... Trees are a renew-able resource. Not short-term, but long-term. It's not like digging a hole and stripping coal and so on. I would say that stewardship is utilizing products in some reasonable fashion" (Egan et al. 1995). Finally, a fourth participant remarked: "Stewardship, of course I'm familiar with, being in the church and being a Christian, you being a steward of various things. Stewardship means, rather, taking care of things, using them wisely" (Egan et al. 1995).

The main point is that the terms "caring" and "stewardship" mean different things to different people. The examples involved a bequest motive, reasonable use, and Christianity. What's impor-tant is that this level of understanding would not have been gained if only mail survey results were relied upon. Focus groups provided a deeper un-derstanding of words and phrases commonly used by landowners. This level of knowledge allowed us to formulate better questions and interpret the responses to subsequent landowner interviews more accurately.

THREE QUALITATIVE VISUAL TECHNIQUES
Stakeholder Mapping

A stakeholder is a person or group affected by solutions or actions; stakeholders have the poten-tial to block or impede implementation, and they may have decision-making and implementation abilities (Fisher et al. 1998). There are a number of different stakeholders: primary stakeholders are directly affected by a solution or action (e.g., resi-dents of an area where trees will be removed); sec-ondary stakeholders are indirectly affected (e.g., residents of an area surrounding the area where trees will be removed); and tertiary stakeholders stand to benefit or be harmed by any solution or action (e.g., business community, consultants, con-tractors, and officials). Several initial questions should be asked about stakeholder identification: Who is already informed and involved? Who will be affected? Who is interested? Who is needed? and Who has been traditionally ignored?

Undertaking a stakeholder analysis to under-stand who and where stakeholders are is a first step in selecting key informants and focus group members and designing an inclusive information-gathering and communication process (Fisher et al. 1998). One method of stakeholder analysis is stakeholder mapping. In stakeholder mapping, groups of people are brought together and asked to work together to draw a map of the people and organizations surrounding an issue (Figure 1). Once identified, stakeholders can be organized by their positions, interests, skills, affiliations, and sources of power and influence. A position is a specific outcome or action perceived as meeting a person's immediate needs (e.g., block the new development). An interest is the desires, fears, be-liefs, values, and concerns that parties hope to advance (e.g., I'm concerned about development and the impact it has on our community). A position is concrete and minimally negotiable, while an interest is abstract and fosters maximum discussion (Table 2).
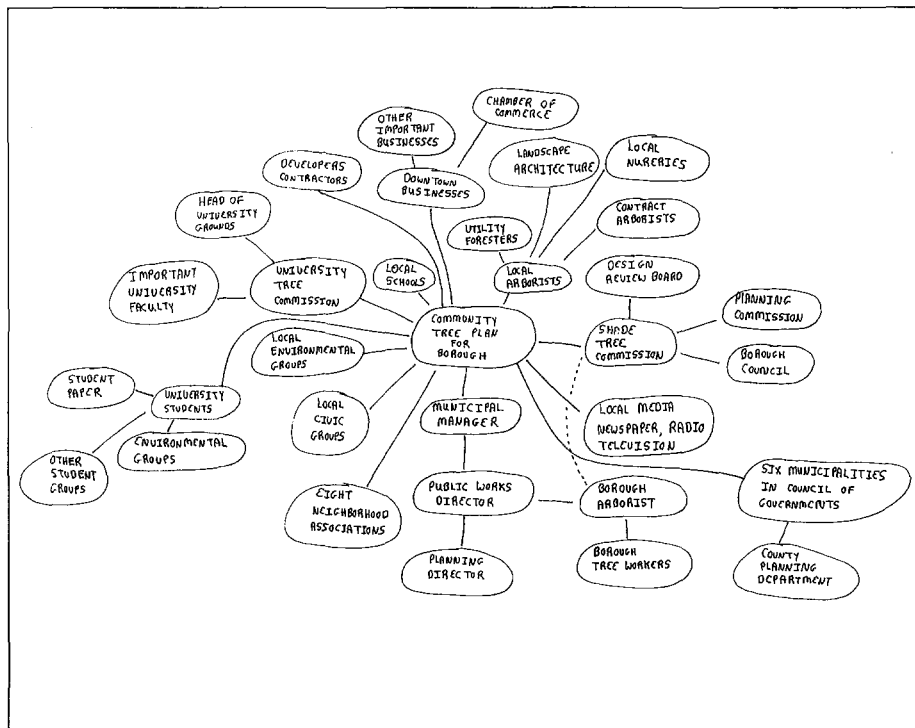
Figure 1. Stakeholder map for community tree plan. After groups and organizations are identified, names of associated people should be mapped. To promote completeness of maps, maps of the same issue or topic should be drawn by different groups of people.

Table 2. How stakeholder information can be organized (adapted from Fisher et al. 1998).

Name of stakeholder
Position
Interests
Skills
Intra-group dynamics
Extra-group dynamics
Sources of power and influence

Vision Galleries

Vision galleries allow groups of people to work together to brainstorm and present information in a recognizable, friendly, and nonlinear fashion. As a conflict resolution tool, vision galleries help opposing groups see, describe, and discuss common issues and concerns. These issues and concerns become common ground for discussion, trust building, and collaboration (Fisher et al. 1998). Vision galleries are an excellent tool for gathering information from youth (Table 3).

Although not all adults are convinced of the appropriateness of youths' input into environmental planning, planners, municipal foresters, and arborists can enhance youths' perception and enjoyment of places by manipulation of the environment. In a study of urban and suburban youth, Willem van Vliet (1981) found that city youth complained about dirt, broken glass, noise, drunks, and traffic, and enjoyed large open spaces. Suburban youth criticized the absence of stores and transportation but enjoyed easy access to the natural environment. Regardless of where they lived, both groups of youth enjoyed the natural environment.

Table 3. Why use visual information gathering and planning techniques? (adapted from Fisher et al. 1998).

Draw things that could take many weeks to say.
Useful for people to "see" elements of the larger picture shared by others.
Stimulates greater participation and discussion; many pens, many hands.
Helps on-the-spot negotiations.
Models a collaborative process; everyone has a piece of the picture, no one has it all.
Supports and builds group interaction and listening. Builds relationships between people and groups.
Captures important information on same page.
Engaging and fun for most people. Stimulates conversation and exchange.

The vision galleries in Figure 2 are from a group of people often ignored when planning and designing tree planting and other community forestry programs—high school and other youth. As an example of the valuable perceptions of youth, Pennsylvania rural, suburban, and urban high school students worked in separate groups in the same room to consider three questions: 1) Which natural resources are associated with communities? 2) Which benefits do they provide people? and 3) Which problems do natural resources associated with communities have? Although it takes some searching by those not included in the exercise, in the galleries in Figure 2, the high-school students identified many resource benefits such as trees, clean water, recreation, shade, and fresh air. They also identified concerns for natural resources including overcrowding, litter, pollution, and mistreatment of trees and forests. Using vision galleries for actually seeing and then discussing common benefits and concerns provided an awareness of shared thoughts and an avenue for learning, understanding, and collaboration among different groups of young people.

Sacred Place Mapping

People highly value and have affections for places, and these places make up a community's sacred structure (Hester 1990). These places include buildings, outdoor spaces, and landscapes that exemplify, typify, and reinforce the everyday life patterns and special rituals of the community. Their loss would reorder or destroy familiar social and psychological processes (Hester 1990). Sacred places can be considered shared and structured symbols that help ground people in their everyday lives and as change occurs. They provide people with a consistent sense of place and comfort. Sacred places are places that are collectively identified as precious by people in a community. Most are humble places that provide settings for a community's daily routine but combine to create uniqueness. Mapping of sacred places by residents can by used to identify and include valued landscapes and lifestyles when evaluating management, comprehensive, and other plans. It also can help build grassroots action among local citizenry and greater citizen awareness and involvement in planning and growth decisions.

A detailed process for mapping sacred places is described in a number of publications (Hester 1985, 1984). In partnership with the National Oceanic and Atmospheric Administration, the Chesapeake Bay Foundation, and the Alliance for Sustainable Communities, 100 citizens of Union County, Pennsylvania, participated in a large-scale sacred place program in March 1997. The citizens attended two full-day workshops that provided a physical overview of their county using a bus tour, provided exercises in teambuilding and listening, and introduced them to innovative planning and design techniques such as conservation subdivisions. The citizens were then broken into groups and asked to map the sacred places in their county (Figure 3). More than 150 sacred places were identified and mapped, including creeks and streams, landscaped streets, parks, family farms, farmers' markets, churches, ridges, attractive downtowns, historic buildings, and more conceptual community elements such as a rural lifestyle and a historic connection to an agrarian past. After sacred places were identified and mapped, pictures
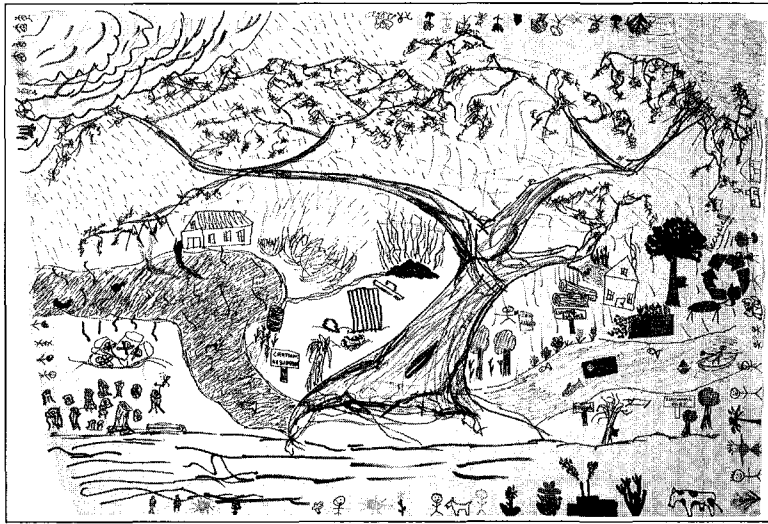
(a)
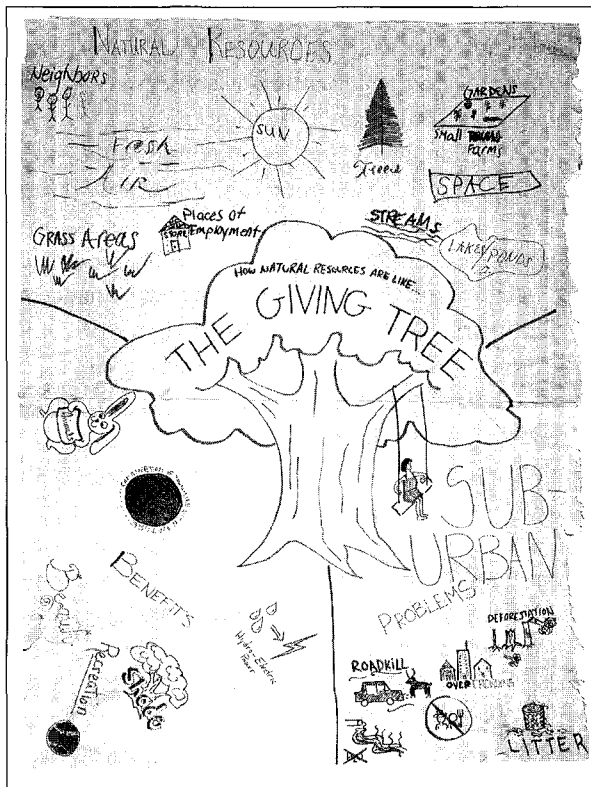
(b)
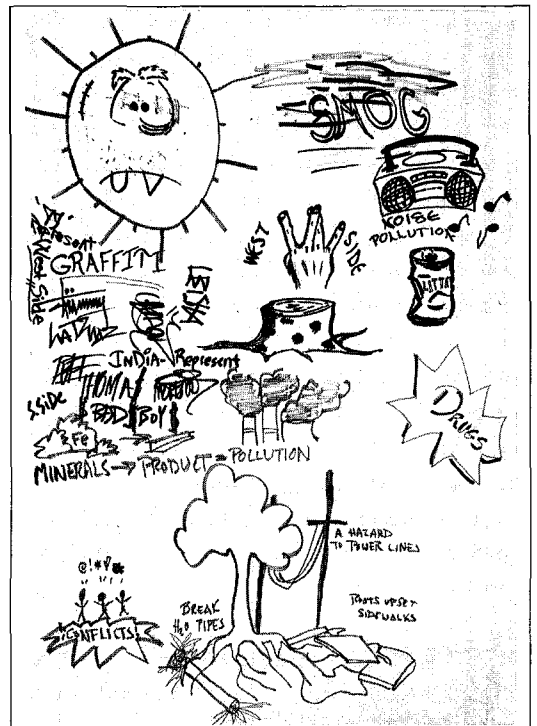
(c)

Figure 2. (a) A vision gallery drawn by a group of rural Pennsylvania high school students. (b) A vision gallery drawn by a group of suburban Pennsylvania high school students. (c) A vision gallery drawn by a group of urban Pennsylvania high school students.
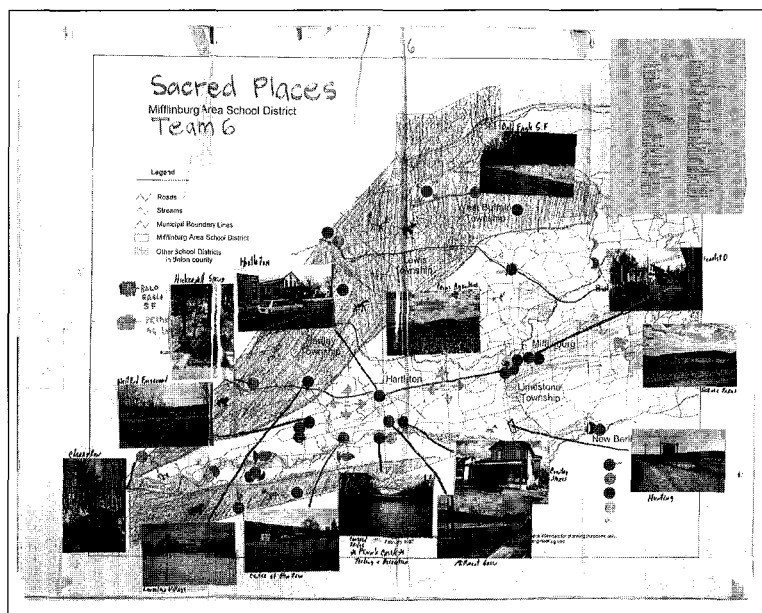
Figure 3. An example of a sacred place map created by residents of Union County, Pennsylvania.

were taken of each place, or historical photographs used to show elements such as rural lifestyle, and a slide presentation was developed. The slide presentation was used by a group of junior and senior high-school environmental club members who were organized to speak with all municipal officials in the county. This attractive and often emotional grassroots method was very effective in letting citizens and officials see problems of, and visualize opportunities for, growth. It allowed people to focus on the important places in the day-to-day landscape. The process helped give credibility to the concept of sacred places and through youths brought such places into the thoughts of municipal officials and others involved in the county's comprehensive planning efforts.

CONCLUSION

There are many interactions between the methods described in this paper. Stakeholder mapping can be used to identify key informants, key informant information can be used to create higher-quality written surveys, and focus groups can be

used to provide better understanding of written survey results. Vision galleries can be used as an introductory exercise and as a collaboration building and conflict resolution tool for focus groups and in sacred place planning.

We believe that facing new and complicated environmental and social issues of the community forest requires a set of skills that go beyond those of tradition. Unlike the incomplete information gathering and planning done in the past by some, we must recognize the benefits of, and thus make the effort to identify and listen to, the "deep knowledge" of people who have been traditionally ignored, and use new methods to interest those traditionally involved.

Today's complex and pressing issues such as habitat destruction, isolation, and fragmentation; ecosystem and watershed management; water quality; open space conservation; and planning for community growth and development, in combination with the familiar conflicts and issues involved in tree planting, removal, and maintenance programs, call for interdisciplinary and inclusive responses. It is evident that to plan for a healthy, connected, and funded community forest, a wide array of people must understand each other and work together. The diverse talents available in communities must be tapped and pooled in creative ways to understand and address the myriad of issues and opportunities surrounding trees and landscapes. Learning about and using more inclusive and participatory information-gathering and planning tools can help increase the democratization of our programs and provide thinkers and doers whose actions are reasoned in local knowledge and reflect more than standard myths or ignorance. Providing opportunities for a wide variety of people to participate will help keep community forestry policy

and programs headed in the right direction and at the appropriate level (Lee 1993).

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Résumé. Lorsqu'on rassemble de l'information et qu'on planifie des politiques forestières communautaires ainsi que des programmes, les forestiers municipaux et les arboriculteurs peuvent trouver difficile d'identifier, d'impliquer et d'écouter chacune des personnes affectées et importantes. De ce fait, les intérêts, les opinions, les attitudes et les comportements de certaines personnes continuent d'être mal compris, non connus et ignorés. Et même, certaines personnes continuent d'être excluses des processus de collecte d'information et de planification de façon délibérée ou par manque d'efforts, ce qui peut conduire à une mauvaise information et une planification faible, un accroissement des conflits et des coûts associés à ces conflits, une mauvaise collaboration, ainsi qu'une aug-mentation du manque de confiance et de l'apathie. L'emploi d'informateurs clés lors d'interviews, de groupes-focus et de techniques visuelles telles que divers modes de cartographie peuvent aider les planificateurs et les arboriculteurs (ou les forestiers municipaux) à mieux développer des enquêtes téléphoniques ou par courrier. Ces méthodes peuvent aussi être utilisées par ces derniers pour recueillir de l'information à propos des opinions des gens et de leurs attitudes, afin d'aider à identifier et inclure à la fois les gens à l'intérieur et à l'extérieur du processus de planification forestier communautaire, et afin de diminuer les conflits.

Zusammenfassung. Beim Sammeln von Informationen und Planen von kommunalen Baumverordnungen und Programmen kann es für Forstleute und Arboristen schwierig sein, alle wichtigen und betroffenen Personen zu identifizieren, sie zu involvieren und ihnen zuzuhören. Dementsprechend kommt es zu fortgesetzten Missverständnissen. Es wird auch weiterhin Personen der Zugang zu Informationen durch Absicht oder Nachlässigkeit verwehrt, was zu schlechter Planung und Informationslage, wachsenden Konflikten und Kosten, schlechter Zusammenarbeit und wachsendem Misstrauen führt. Der Gebrauch von Schlüsselinformativen, Fokusgruppen und visuellen Techniken, wie Informationstafeln, Visionsgalerien und kartographierten heiligen Plätzen kann Planern und Forstleuten/Arboristen helfen, bessere Post-und Telefonumfragen zu entwickeln. Diese Methoden können auch von ihnen selbst verwandt werden, um Informationen über die Meinungen und Einstellungen von Personen zu sammeln, Insider und Outsider in der Gemeinde zu identifizieren, sie in den Planungsprozess einzufügen und Konflikte zu reduzieren.

Resumen. Cuando se obtiene información y se planean políticas y programas en las comunidades forestales, los forestales municipales y los arboristas pueden encontrar difícil identificar, incluir y escuchar a todas aquellas personas involucradas. Las preocupaciones, creencias, actitudes y comportamientos de algunas personas son desconocidas y muchas veces ignoradas. De ahí que, algunas personas sean excluidas a la hora de recoger esta información y la planeación contiene vacíos de información, incrementando con esto el conflicto, la pobre colaboración y el incremento de la apatía. El uso de entrevistas, grupos focales y técnicas visuales, tales como el mapeo, pueden ayudar a los planeadores municipales y arboristas a lograr un mejor desarrollo de las encuestas por mail y teléfono.