Selecting Wildlife and Environmental Education Programs for Adult Organizations in an Urban Area

by

Susan Stansbury Leslie

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APPROVED:

Patrick F. Scanlon, Chair

Cornelia B. Flora

Robert H. Giles, Jr.

Michael P. Hite

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(ABSTRACT)

Natural resource agencies are faced with the challenge of educating a public that has become more urban and removed from the resource base, at the same time that agency revenues have declined. This study sought to identify wildlife and environmental education programs that planners for adult organizations in an urban Virginia area were likely to request for presentation to their groups. It was hypothesized that adult organizations would be receptive to programs that were offered on a free and readily available basis, and that programs specifically about wildlife were more likely to be requested than topics on nature or the environment.

Program planners for adult organizations in an urban area in southwest Virginia were surveyed by a mail questionnaire. A high survey response rate was achieved, and results were considered to be indicative of programs

that would be requested by those organizations.

Education, civic, and neighborhood groups indicated the potential for a large increase in scheduling wildlife and environmental programs if they were free and readily available. However, topics traditionally offered on wildlife and the environment did not generally appeal to civic and neighborhood groups. Providing programs to environmental groups and garden clubs did not appear to offer effective and efficient use of limited resources relative to other types of organizations.

Planners for organizations were most interested in programs about wildlife that members might see around their homes or neighborhoods. Results did not support the hypothesis that wildlife topics would appeal to groups more than environmental/nature topics. Programs on sharing wildlife and nature activities with children and recycling were 2 of the most popular program topics.

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Introduction

Traditionally, wildlife management emphasized conspicuous species. Staff of state and federal wildlife programs focused on game species (Leedy 1987), resources found in rural or wild areas (Lyons and Leedy 1984), and on the "consumptive" user (hunters, anglers, and trappers) of the wildlife resource (California Department of Fish and Game 1991). While society was becoming more urban and oriented to "nonconsumptive" interests in wildlife, wildlife managers concentrated on interests of sportsmen and on the rural community (Kellert 1989).

Today, however, fish and wildlife agencies are responding to changing demographic and sociological factors and to a more diverse group of people who benefit from wildlife experiences. Interest is shifting from agriculture and forest to urban and other wildlife habitats. Attention is being given to a more diverse group of species as well.

Observing wildlife in residential environments has become a major recreational activity (Shaw et al. 1985, Idaho Department of Fish and Game 1990). According to the Urban Wildlife Committee of The Wildlife Society, the urban-suburban environment is where most people today interact and learn about wildlife and nature in general

(Tylka et al. 1987). Even though urban residents reportedly have a strong interest in wildlife, they have limited knowledge of animals and wildlife ecology (Gilbert 1982, Best 1983, Adams, C.E. et al. 1987, Penland 1987).

With public interest already manifest, fish and wildlife agencies have the opportunity to foster an educated public that is potentially supportive of agency activities. One way agencies are capitalizing on the urban public's interest in wildlife is through implementation of urban wildlife programs. A well-planned and operated urban wildlife education program may enhance the public image of the state wildlife agency and may generate public support (including voter support) for the agency's activities (Tylka et al. 1987). Although wildlife agencies are beginning to implement urban programs (Kansas Department of Wildlife and Parks 1988, Missouri Department of Conservation 1989, Idaho Department of Fish and Game 1990, California Department of Fish and Game 1991), the questions of what topics to offer in an urban education program, and how best to present these topics, are of concern for most of them.

The Wildlife Society, in collaboration with the Nongame Committee of the International Association of Fish and Wildlife Agencies, has established guidelines for implementing urban wildlife programs (Tylka et al. 1987). Major components of their recommendations are public

awareness and public involvement, which they describe as critical to establishing and maintaining successful programs. Within the guidelines it is suggested that a large part of an urban program's finances (30 to 60 percent of the budget) be directed to public information, education, and extension services such as organizing public workshops, short courses, or conferences on topics like birdfeeding and wildlife damage control (Tylka et al. 1987). The committee described the role of education as one that allows residents to appreciate better the fish and wildlife resources and their ecological requirements and interrelationships.

It has been suggested that interest in and concern for wildlife can also be used to facilitate creating awareness of environmental problems (Davey 1967, LaHart and Tillis 1974, Hair and Pomerantz 1987). Some members of the public may be more responsive to environmental education programs when they are presented in terms of wildlife and wildlife habitat rather than when they are presented without a wildlife emphasis. Some nature center directors have found that people are more likely to participate in programs that incorporate wildlife than ones billed solely as nature or environmental programs (T. Clarke, Roanoke City Parks and Rec., pers. commun., D. Crane, Blacksburg Parks and Rec., pers. commun.). Crane has also observed that people who attend park programs appear to be more willing to pay a fee

for a hike that is advertised as a bird walk than one that is simply described as a nature walk. Schools are more likely to ask for talks about snakes and other wildlife than ones on pollution (T. Clarke, Roanoke City Parks and Rec., pers. commun., D. Crane, Blacksburg Parks and Rec., pers. commun.). Wildlife can potentially play a valuable role in environmental education for a public that may be tiring of messages concerning pollution and environmental degradation.

State agencies are recognizing the need for additional funding sources for nongame programs such as urban wildlife programs (Kansas Department of Wildlife and Parks 1988, Kentucky Department of Fish and Wildlife Resources 1988, Delaware Division of Fish and Wildlife 1989, Idaho Department of Fish and Game 1990, California Department of Fish and Game 1991). For many agencies, new funding bases must be developed before large-scale increases in nongame programs can be implemented to meet the demand (Kansas Department of Wildlife and Parks 1988, Delaware Division of Fish and Wildlife 1989, Idaho Department of Fish and Game 1990). A more educated, involved public is a potential source (directly or through voter support) of new funds.

Park systems operated by local governments provide a potential avenue to reach members of the adult public with programs about wildlife and the environment. Urban and/or suburban park system programs, including those offered

through nature centers and environmental education centers, may provide a realistic way for state agencies to reach a large number of people with minimal costs.

Fish and wildlife agencies throughout the country are now emphasizing the need to increase public awareness and involvement concerning wildlife (Kansas Department of Wildlife and Parks 1988, Delaware Division of Fish and Wildlife 1989, Minnesota Department of Natural Resources 1989, Missouri Department of Conservation 1989, Idaho Department of Fish and Game 1990, Sargent and Burch 1990, U.S. Fish and Wildlife Service 1990, California Department of Fish and Game 1991). Assuming that participation in public nongame education programs is voluntary (in contrast to being offered to a "captive" audience such as school children or people applying for a license), it should be useful to know what topics will sufficiently interest an audience to attract their attention and involve them in wildlife-related activities, and in what programs they are most likely to participate.

If potential users are not surveyed, agencies may offer programs that appeal to wildlife professionals and a few citizens, while ignoring the interests and preferences of a large segment of the population. For example, results of one study indicated that services provided to the public at many wildlife refuges were probably well beyond the needs of

the majority of visitors based on their assessed level of knowledge concerning wildlife (Applegate et al. 1982). Need for materials of a much less sophisticated nature than currently used was indicated. Moss (1985) found that most respondents in a Virginia survey participated in nonconsumptive activities that required little personal time, money, or knowledge of wildlife. Studies are needed if nongame education programs for adults, including those on urban wildlife, are to attract as large and diverse an audience as possible.

Objectives

A survey was conducted of the people who make lists of potential programs, select them, and otherwise serve as the "program chairperson" for selected adult organizations in the Roanoke Valley of Virginia. The objectives of the study were:

1. To determine the wildlife, nature, and/or environmental topics that program planners for selected adult clubs and organizations in an urban Virginia area are likely to request for presentations to their groups.

2. To determine the types of wildlife, nature, and/or environmental presentations (e.g., field trips, slide presentations) that program planners are likely to choose for their groups.

3. To clarify the demand for each topic and program alternative offered in the survey.

4. To determine the types of user groups that are likely to indicate high interest in each topic and program.

5. To compare demand for topics related to nature and the environment to demand for similar topics that relate specifically to wildlife.

Literature Review

Human Dimensions in Natural Resource Management

Natural resource management is in a period of transition. Emphasis is shifting from the natural resources themselves to the people who manage and use the resources (VanMeter 1988). A crucial role that fish and wildlife agencies can play is to instill within the public a sense of responsibility toward fish and wildlife and an understanding of the impacts human actions and attitudes can have upon these resources (Kentucky Department of Fish and Wildlife Resources 1988).

Over 75 percent of Americans live in urban areas (Barringer 1990). By numbers alone, these people can be a dominant influence in American society and have the potential to impact wildlife practices and programs tremendously (Lyons and Leedy 1984). For example, "anti-hunters" (identified by their strong agreement with the statement "hunting for sport is wrong"), are likely to reside in large urban areas (Kellert 1978). In New Jersey, where respondents were asked whether they approved or disapproved of deer hunting, those from more densely populated areas were less likely to approve than respondents

from less populated areas (Applegate 1973). Hunting and trapping have been opposed in that state through the use of court injunctions, local ordinances, and bans imposed at the state level by the legislature.

Kellert (1978) found that "anti-hunters" have among the lowest knowledge-of-animals scores of any group studied. In the same study, 29 percent of a national sample reported strong objection to sport hunting. The strength in numbers of such a group, as well as their reported lack of knowledge, can influence the future of wildlife and wildlife management.

To win support for wildlife programs, it has been suggested that wildlife professionals need to come "out of the wilderness" and "enter the urban arenas of public opinion formation" (Shaw and Supplee 1987). Emphasis on human dimensions and education has traditionally been limited, although numerous potential benefits from increased public awareness and involvement have been proposed in the literature. Much of the discussion which follows concerns potential benefits. It is important to note that, in many cases, research to substantiate the claims has not been conducted, perhaps because of the recency of the concepts and limited funding available in areas of human dimensions in wildlife.

A review of strategic plans written by 12 state and

federal agencies in the past 5 years indicates that most natural resource agencies are probably already investing resources to enhance public awareness of ecological principles concerning wildlife. These education programs are provided in addition to traditional programs related to "consumptive use" of the wildlife resource. Although hunters, anglers, and trappers have been the historical constituencies of state wildlife agencies, wildlife is the property of all of the people of a state. Consequently, the ultimate constituency is the general public (California Department of Fish and Game 1991). Many possible benefits may accrue to people, to wildlife agencies, and ultimately to the wildlife resource from programs offered to the general public. To take thorough advantage of information and education expenditures, agencies need to know where people's interests lie and the type of programs likely to draw an audience.

Financial Support for Wildlife Agencies

Hunters, anglers, and trappers have historically provided financial support for state fish and wildlife agencies through the purchase of licenses, the donation of funds, volunteer programs, and indirectly through excise taxes on such items as gear and ammunition. Through this

support, the agencies have been able to protect and manage large areas of land that provide habitat for nongame as well as game species (California Department of Fish and Game 1991). As agencies have begun to shift emphasis from game programs, traditional constituencies have expressed concern that their needs are not being addressed in relation to the financial support they are providing (California Department of Fish and Game 1991). An educated public is potentially a broadened financial base for activities that benefit the wildlife resource.

Public Participation

Another way constituency groups can influence agency activities is through public participation as part of the planning process. Although new to fish and wildlife agencies, (McMullin and Nielsen 1991), public participation is an element now common to the planning process of natural resource agencies (Randolph 1987). Use of the participatory process in planning for fisheries and wildlife resources is increasing. Agency plans for the 1990's consistently stress the need to provide for the effective involvement of the public in policy development, land use planning, and wildlife management (Kansas Department of Wildlife and Parks 1988, Kentucky Department of Fish and Wildlife Resources

1988, Delaware Division of Fish and Wildlife 1989, Minnesota Department of Natural Resources 1989, Missouri Department of Conservation 1989, Idaho Department of Fish and Game 1990, Sargent and Burch 1990, U.S. Fish and Wildlife Service 1990). However, the public does not necessarily have the knowledge of wildlife and habitat requirements to contribute effectively to the process. With increasing public involvement in the planning process, it is more important than ever that the public be educated.

Public Support of Wildlife Agencies and Legislation

Collective support of the general public is needed if wildlife conservation and management efforts are to be successful, necessitating a broad constituency (Kentucky Department of Fish and Wildlife Resources 1988). Citizen concern for environmental quality and wild, living resources can help to strengthen programs of federal, state, regional, and local agencies involved in managing natural resources (Jahn 1989). If an educated public becomes more supportive of wildlife issues, wildlife can benefit in a number of ways. Legal and institutional arrangements to implement scientifically based principles are needed for effective management of natural resources (Holt and Talbot 1978). An educated citizenry can help to provide benefits to wildlife

by expressing their support to government officials, who in turn can enact laws and fund agency activities that benefit wildlife (Yeomans and Barclay 1981, Schaefer 1987).

Urban residents have an indirect influence on wildlife programs simply by the dominant role of their representatives in state legislatures and the U.S. Congress. Legislation and appropriations that affect state and federal agencies are determined by decision-making bodies dominated by urban legislators (Davey 1967, Lyons and Leedy 1984). On a local level, public commissions and institutions may be convinced through educational campaigns (either directly, or indirectly through an educated citizenry) of the need for habitat maintenance and development (Sterns 1967). Governmental bodies are also sources of funding for wildlife agencies and programs.

Another form of agency support by the public can come from volunteers. Biologists have taken advantage of high public interest in wildlife and wildlife watching by recruiting volunteers to help in a number of ways. For example, the Alaska Department of Fish and Game was able to recruit more than 100 volunteers to help with a nesting loon study in the summer of 1986 (Tankersley 1987). Considering budget and staff limitations, volunteers can help to provide services that may otherwise be neglected.

Environmental Literacy

State natural resource agencies are expanding environmental education programs (Connecticut Department of Environmental Protection 1987, Minnesota Department of Natural Resources 1989, Illinois Department of Conservation 1990). Although the environmental movement has been in the spotlight for over 2 decades, public environmental knowledge remains at an alarmingly low level (Arcury et al. 1987). If it is true that citizens make decisions that impact natural resources and environmental quality, and that decisions made are dependent on each individual's knowledge (Kinsey and Wheatley 1980), attitude and values in the area of resource conservation (Missouri Department of Conservation 1989), then limited environmental knowledge may impact the wildlife resource. It has also been suggested that public interest in wildlife can be used to teach awareness of environmental problems (Davey 1967, Lahart and Tillis 1974, Hair and Pomerantz 1987).

In a survey of Virginia citizens, most respondents valued wildlife's ecological, viewing, cultural, existence, and scientific benefits (Moss 1985). Because the health of the wildlife resource (as well as the health of human beings) is often dependent on the state of the environment, it may be that building public awareness and interest in

wildlife will not only benefit wildlife, but will also help to build environmental awareness.

Pest Management/Tolerance

Many homeowners experience problems with wildlife, and most do not know what to do or whom to call when a conflict situation arises (O'Donnell and VanDruff 1987). Besides helping people deal with specific problems, education may help the public become more receptive to wildlife species that are viewed as undesirable (Yeomans and Barclay 1981), and may help to change perceptions of what constitutes a problem. From personal experience, there are those who would consider shooting a woodpecker because wood droppings from a tree are littering their driveway. Others shoot bluejays because of their aggressive behavior toward other birds at the birdfeeder. Increasing public knowledge, and involvement with wildlife resources may help change perceptions of what are "wildlife problems" in situations such as the above.

Benefits to People

> Grouse or warblers, buffalo or bear, rabbits or deer - animal lives enrich culture with the age-old dance of life. As much as fine art, theatre, or literature, they are poetry in motion (Rolston 1987).

Surveys indicate that the presence of wildlife is important to people and adds enjoyment to their lives (Pudelkewicz 1981, Yeomans and Barclay 1981). People attract wildlife to their residences because they find the presence of wildlife personally beneficial, and because they derive feelings of satisfaction from helping wildlife (Yeomans and Barclay 1981).

People who participate in wildlife recreation activities may agree with the statement: "The more we know the more there is to see, and the more we see, the more there is to be admired" (Rolston 1987). Increasing the public's appreciation of wildlife can increase the benefits that they derive from it (Giles 1971). Research on methods to build human awareness and contact with nongame species can help to increase the enjoyment people derive from observing them (DeGraaf and Payne 1975).

Shaw (1987) described the wildlife manager's role in increasing the benefits people receive from wildlife:

> Wildlife managers must recognize that resource management involves more than manipulating the resource. One of our important functions should be to provide opportunities for people to experience and learn about nature. This approach includes not only managing the resource so that it is available but also creating situations in which learning about nature takes place. One of the most powerful tools we have for accomplishing this is the provision of information about wildlife and other environmental issues. Accepting this role as communicators is essential if wildlife managers are to be effective in providing the broad range of benefits associated with wildlife-oriented recreation.

Wildlife education has the potential to introduce people to the joys of wildlife and to provide benefits that come from feeling they have helped wildlife in some way.

Habitat Management on Private Urban Lands

Private land and water management can have an effect on fish and wildlife resources on both public and private lands (Missouri Department of Conservation 1989). Landscape maintenance practices can alter important bird habitat in residential areas (DeGraaf and Thomas 1976). For example, the common landscape practice of pruning lower limbs from trees and shrubs for ease of mowing and visibility removes foliage layers important to some species (DeGraff and Thomas 1976). For birds, the principle of habitat diversity (i.e., that the way to provide for a maximum diversity of songbirds is to provide or maintain a maximum diversity of habitat)

has been found to apply to individual houselots as well as large developments (Lucid 1974). DeGraaf (1976) suggested that many landscape maintenance practices will need to be modified if we want to have certain species in areas of human habitation. It is possible that education can play a role in modifying some urban landscape practices.

Costs in time and labor may possibly be saved, and environmental benefits may accrue on both public and private lands if public perceptions of acceptable landscaping practices can be altered. For example, open space maintenance costs could be reduced, and the diversity of vegetation and wildlife increased, if some mowed grass areas were allowed to revert to natural vegetation through natural succession (Pudelkewicz 1981). Homeowners who choose to mow a small portion of their acreage can save time and energy and have less space where chemical fertilizers, pesticides and herbicides need be applied. Watersheds can also benefit from decreased runoff when "manicured" area is reduced.

Responsible Development

Habitat loss due to human activities is a major problem for wildlife (The Wildlife Society 1961, Minnesota Department of Natural Resources 1989). David Whitehurst, fish division chief of the Virginia Department of Game and

Inland Fisheries, sees the challenge of trying to maintain and enhance wildlife resources in the face of significant land-use changes. According to Whitehurst, the Department cannot be successful unless people who enjoy the wildlife resources support the decision making processes (Cochran 1990b). Education can be a step toward public support of responsible wildlife management practices.

Local land development is one area where sound decision making needs support. Although features attractive to wildlife often are not incorporated in development planning (Progulske and Leedy 1986), there are opportunities for habitat development in newly-planned communities, town house developments, parks, parkways, cemeteries, etc. (Stearns 1967). For example, new developments with some native vegetation retained have been found to have considerably higher bird species diversity and numbers than similar developments where native vegetation is not retained (Lucid 1974). Developers in some parts of the country have capitalized on the value of wildlife to promote their developments (Lyons 1987). It is possible that an educated citizenry with wildlife interests can encourage developers to consider habitat in the planning stages before habitat is destroyed.

Why Educate Adults?

Wildlife education programs are often aimed at children, and research has been applied to help in developing educational materials for children (Lyons 1987). According to Mr. Bud Bristow, executive director of the Virginia Department of Game and Inland Fisheries, one of the agency's greatest challenges is to get young people interested in the outdoors, "whether for hunting or fishing or just observing wildlife" (Cochran 1990a). Bristow saw a need to re-position the agency so that it can assume that young people will have a knowledge of and relationship with the natural world. Whitehurst, the fish division chief in the same agency, said that we have to teach young citizens the value of animals and the habitat that supports wildlife (Cochran 1990b).

If education of children is so important, then why be concerned with adult education? Bennitt (1946), the first president of The Wildlife Society, saw education as the "most urgent activity" for wildlife professionals. He described education of laymen as an even greater challenge than education in the schools. Adults are currently in positions to vote, make decisions on property management, support agency programs, and so on. The potential influence parents may have on their children is also important.

Apparently, effective ecology courses have been taught to parents and children together (Gennaro et al. 1983), and Schicker (1988) has suggested that parents and children can work jointly creating wildlife habitat in their own yards. Parents have the opportunity to provide support, encouragement, and day-to-day contact for children with the natural world from an early age.

Research Needs

State wildlife agencies are emphasizing education efforts for the general public, studying the public's needs and interests in relation to natural resources, and seeking how best to meet these needs. One approach used by some agencies is creating urban wildlife programs. The first state urban wildlife programs began in 1978 (Lyons and Leedy 1984). A 1984 survey of state urban wildlife programs found their primary objectives were: "...(1) to encourage habitat management in urban environments to preserve wildlife, (2) to provide opportunities for wildlife enjoyment, and (3) to help urbanites gain an appreciation of wildlife and the work of the wildlife agency" (Lyons and Leedy 1984).

Some state agencies are expanding their efforts to provide public information and wildlife appreciation opportunities (Minnesota Department of Natural Resources

1989). A goal for the Missouri Department of Conservation (1989), considered by many to be one of the more progressive agencies in the U.S., is:

> To provide programs which encourage a conservation ethic in Missouri citizens that will: ensure the wise use of forest, fish and wildlife resources; enhance public understanding of ecological systems; engender a respect for the outdoors; and teach the interrelationship of all natural resources.

Agencies hoping to accomplish such goals must first attract an audience if educational programs are to be effective. Research can help determine where to begin, including the topics to offer, the type of programs that would appeal to potential user groups, location of offerings, and how best to advertise programs.

Methods

A mail survey was conducted of 163 program planners for selected adult organizations in the Roanoke Valley of Virginia. Program chairs were asked to indicate the likelihood that they would schedule each of a number of program topics concerning nature, wildlife, and the environment, and the types of presentations they were likely to request. Additional questions were designed to provide information that would facilitate developing and implementing environmental education programs for adult organizations.

Survey Design and Implementation

Study Area.--Organizations in the Roanoke Valley were chosen as the study population for several reasons: 1) staff of the Roanoke City Department of Parks and Recreation had expressed interest in and commitment to creating environmental education programs that meet the needs and interests of citizens in the Roanoke Valley; 2) compared to communities immediately surrounding the University, the Roanoke Valley has a large and diverse population; 3) Roanoke's proximity to the University facilitated developing

and implementing the study.

Selection of Study Population.--Organizations included in the study (Appendix B) were listed under Civic, Environmental, Educational, and Senior Citizen categories in the August 1991 Civics Book compiled by the Council of Community Services' Information and Referral Center of Southwest Virginia. These categories were chosen because they included groups that plan a variety of programs as part of their regularly scheduled meetings. Eight organizations listed under these categories were not included in the survey sample for various reasons. Regional groups that represent organizations already included in the survey sample were not contacted (e.g., District Governor of Lions Clubs and the Virginia Federation of Woman's Clubs). Six organizations listed under Hobby and Sports were added to the Environmental category because the hobbies were directly related to nature or the environment (e.g., Roanoke Valley Bird Club and Roanoke Valley Mineral and Gem Society). Other hobby and sports groups were not included because their program topics were expected to be specific to the hobby or sport most if not all of the time (e.g., Roanoke Frisbee Disc Association, Roanoke Valley Bridge Association, Roanoke Valley Coin Club). The environmental groups were diverse and included such organizations as beekeepers, a

trail club, and a wildflower group.

Survey Construction.-- A 10 page mail survey (Appendix A.1) consisting of 4 parts was developed using guidelines outlined in Dillman's (1978) Total Design Method. The survey was printed professionally and included art work. The first section asked program planners to indicate the likelihood that they would schedule each program from a list of topics related to nature and the environment. For each of the 20 topics listed, respondents were asked to indicate if they were 'highly likely', 'somewhat likely', or 'not likely' to schedule such a program. A fourth choice, 'not sure', was included primarily for those respondents who were not familiar with a topic.

In part 2, respondents were asked 15 questions similar to those in part 1, but each question directly referred to wildlife. For example, a question in part 1 asked respondents to indicate the likelihood that they would plan a program about nature photography. A corresponding question in part 2 addressed interest in a program about wildlife photography. Part 1 contained a question about growing native plants, and a corresponding question in part 2 asked about using native plants to provide food and cover for wildlife. Not all questions in part 2 were a direct corollary of a question in part 1, but they all did pertain

to wildlife. Respondents were also asked to indicate the type of wildlife about which they would be most likely to schedule a program. At the end of both sections 1 and 2, planners were asked to go back and place a star beside the three topics they were most likely to schedule for their organization.

For the purposes of this study, wildlife was defined in the survey as any wild bird, fish, mammal, reptile, amphibian, or butterfly. Respondents were asked not to include pets, stray animals, or plants as wildlife. "Nature and the environment" were not defined in the survey, but were considered to include all physical, biological, and chemical conditions that surround a community.

Part 3 of the survey described 5 types of presentations or programs (nature walk, slide presentation, field trip, workshop, and movie or video) used to communicate information about nature, the environment, or wildlife, and asked respondents to indicate the likelihood that they would plan each type of program for their organization. Respondents were also asked how they were most likely to read or hear about environmental education programs; if they thought their organization would be willing to pay a minimal fee for a presentation, and if so, how much; and questions related to the format of their meetings. The final section of the survey covered demographic information about members

of the group, as well as questions related to club organization, and current and future programs.

A pretest was conducted using 12 program planners for organizations in Blacksburg, Virginia. Pretest participants were asked to complete the questionnaire and to comment on the time required, survey structure, question formation, confusion due to wording, etc. The survey was also reviewed by the Public Information Officer for the City of Roanoke, the Director of Roanoke City Parks and Recreation, and by the Directors of the Office of Measurement and Research Services and the Institute for Leadership and Volunteer Development at Virginia Polytechnic Institute and State University.

Survey Implementation.--So that surveys could be sent directly to program chairs when possible, a letter of introduction (Appendix A.2) was mailed to presidents of organizations, explaining the questionnaire and asking that they return an enclosed addressed, stamped postcard (Appendix A.3) with the name, address, and phone number of the person in the organization who plans programs. Presidents who did not return the postcard and for whom phone numbers were available were contacted by telephone if they could be reached before the surveys were mailed.

Fifty-one percent of those who did not return the

postcard (52 presidents) were reached by phone. Twenty-seven organizations were removed from the original list to be sampled because they had merged with other clubs, had disbanded, the address was incorrect and no forwarding address was available, or the president had indicated the club would not participate in the study (usually because they did not have programs at their meetings). A telephone conversation with the president of the Roanoke City Council of PTA's resulted in the addition of 27 individual PTA's to the mailing list.

A revised mailing list was compiled based on postcard and phone responses. Questionnaires were mailed to program planners on February 8, 1992. If a president did not return the postcard indicating the name and address of the program chair, and could not be reached by phone, the survey was mailed to the president. The survey packet included a letter of introduction and explanation (Appendix A.4), a survey (Appendix A.1), a stamped, addressed postcard (Appendix A.5) asking again for the name and address of the program planner for the Parks Department mailing lists (in case officers had changed since the first mailing in November, and because we had not been able to obtain information about each organization's program chair), and an addressed, stamped envelope. Parks Department stationary was used for all correspondence.

One week after the survey was mailed, a postcard (Appendix A.6) was sent to all organizations thanking those who had responded and encouraging those who had not to return the survey. Two months after the initial survey mailing, another complete mailing was sent to the organizations that had not responded. Included were a new cover letter (Appendix A.7) explaining the importance of the survey and encouraging participation, another copy of the survey, and an addressed, stamped envelope.

Statistical Analyses

Responses from the questionnaire were coded onto optical scanning sheets and then loaded into the mainframe computer. The data were then downloaded to disk for use on a personal computer. Statistical analyses were performed using PC/SAS (SAS Institute 1988).

Summary statistics were calculated for each question on the survey, and frequency tables were used to show the distribution of variables overall and by organization type (Appendix C). Ordered categorical variables were assigned numeric values and were treated as numeric variables (e.g., highly likely = 1, somewhat likely = 2, etc.) (Schulman 1992). A 'not sure' response was treated the same as no response, and was not assigned a value. Categorical

variables that were not ordered were converted to dummy variables where appropriate in order to use all of the information available in the data (Schulman 1992). For example, organization type, a single variable with 5 values, was converted to 5 dummy variables, each with a value of 1 or 0, in order to perform correlation analysis.

Correlation coefficients (Pearson's r) were used to help measure relationships between two variables. Because of the social science nature of the study and the influence of dummy variables, an alpha level of 0.01 was used to determine significance for correlation coefficients. When measuring relationships between types of organizations and topics, a significant positive correlation indicated that an organization type (e.g., civic clubs) was likely to schedule a program topic relative to other types of organizations. For example, a p value of 0.003 obtained from correlations performed between garden clubs and the topic "using native plants to provide food and cover for wildlife", indicated that, relative to other types of organizations, garden clubs were likely to schedule a program on the topic. A significant negative correlation indicated the organization type was not likely to schedule a program topic relative to other types of organizations.

Differences among types of organizations were tested using analysis of variance (ANOVA), which compares the means

of populations. When ANOVA results indicated a significant difference among organizations, a multiple range procedure (Tukey's Studentized Range (HSD) Test), was performed to determine where the differences occurred. Tukey's multiple range procedure, a more conservative test than ones often used in the physical or biological sciences, was chosen because of the social science orientation of the data. In fields such as the social sciences, where knowledge is more tentative and temporal, a more conservative test is often used (Schulman 1992). An alpha level of 0.05 was considered appropriate to determine significance for analysis of variance due to the conservative nature of the Tukey's tests that followed.

Because correlation results showed relationships relative to all other respondents when dummy variables were needed, percentages were also used to help determine likelihood that an organization type would schedule a program topic. For example, although 77 percent of civic organizations were likely to schedule a program on recycling, a significant positive correlation was not found because the topic was popular with most types of organizations. There were technically 5 choices for each topic, i.e., highly likely, somewhat likely, not likely, not sure, and blank. If a respondent chose highly likely or not likely, they were considered to be fairly sure that they

would or would not schedule that program. If 50 percent or more of the respondents for a type of organization indicated they were highly likely to choose a certain topic, that topic was considered one worthy of consideration for preparation of a presentation. If 50 percent or more said they were not likely to choose a program, it was judged that resources could best be placed on development of other programs. This technique helped to accentuate or eliminate topics that were not flagged by correlation coefficients due to the dummy variable factor.

When calculating percentages, a highly likely response was determined by taking "starred" items into consideration. If a respondent placed a star beside a topic (hereinafter "starred") indicating the topic was one of three they were most likely to select, their rating for that topic was elevated to the next highest response (i.e., 'somewhat likely' became 'highly likely', 'highly likely' became 'greater than highly likely', etc.). This procedure was used in an attempt to add consistency to the expressions of respondents and as an alternative and extra means for evaluating expressed preference. If a respondent was consistently conservative when rating topics (i.e., frequently chose 'somewhat likely' or 'not sure'), or if the respondent was consistently generous with ratings (i.e., frequently chose 'highly likely'), the starring system helped compensate for this potential individual bias.

Results

Survey Response Rates

Of 163 sets of introductory letters and cards mailed to presidents of organizations, 61 completed postcards (37 percent) were returned. After additions and deletions based on postcard or telephone responses, the survey sample size remained at 163. Of 163 surveys mailed, 2 (1 percent) were not delivered because of incorrect or incomplete addresses. The undelivered surveys were dropped from the sample, leaving a workable population of 161 organizations.

A total of 121 surveys were returned, yielding a response rate of 75 percent. Of these, 109 (68 percent of entire sample) were completed and 12 (7 percent of entire sample) were returned but not completed. Reasons given for not completing the surveys were: no longer functioning or inactive at this time (4); meet only to conduct business and/or do not have programs as such (2); not likely to schedule programs related to nature, wildlife, or the environment (3); programs are booked (1); not interested at this time (1); give all programs myself (1). The groups that were not likely to select wildlife or environmental programs (i.e., the 8 functioning organizations who returned

the survey but did not complete it), were included in statistical analyses. However, 1 of these 8 provided no identification and could not be included in analyses done by organization.

Response rates by type of organization ranged from 50 percent to 81 percent (Table 1). When senior citizen groups were removed (only 4 senior citizen surveys were sent), the range of response rates was from 67 to 81 percent. The greatest response rate was to the initial mailing and/or follow-up postcard. Of 121 surveys returned, 86 (71 percent of those who responded) were returned before the second set of surveys was mailed. The second packet with a new survey resulted in 34 additional returned surveys (28 percent of the total response), but 9 of those 34 were returned but not completed. Seventy-five percent of all surveys that were returned but not completed were returned in response to the second set of surveys.

Response rate was diluted because some surveys were sent as a courtesy. If a president returned the initial postcard, or gave the name of a contact person over the phone, a survey was sent to that person, even if the organization no longer appeared appropriate for the study. Fourteen Extension Homemakers Clubs were sent the first mailing. Following the mailing, the Extension Specialist who plans and presents all of the clubs' programs indicated

Table 1. Survey response rate by organization.

Type of organization	Surveys mailed	Surveys known not delivered	Responded to survey[a]	Response rate[b] (percent)
Civic	47	1	32	70
Garden	27	0	22	81
Environmental	15	0	10	67
Neighborhood	37	1	27	75
Education/PTA	33	0	26	79
Senior citizen	4	0	2	50
Unknown			2	
Total	163	2	121	75

[a] Includes those who responded but did not complete survey, as well as 4 organizations who said they were no longer active.
[b] Excludes from calculations 2 nondeliverables.

in a phone conversation that the groups were probably not appropriate for the study. However, 3 of the clubs' presidents had returned the initial postcard, and, as a courtesy, were sent surveys. None of them were returned.

Several garden clubs indicated that their numbers had decreased to a few elderly members who no longer met regularly. However, they also were mailed surveys because they had returned the postcards or had given the name and address of a contact person over the phone. Most of these groups did not return the survey. In addition, several councils (e.g., the Roanoke County Council of PTAs and the Citizen's Environmental Council), were mailed surveys for the same reasons explained above, although conversations with presidents of other councils (e.g., Roanoke City and Salem City Councils of PTA's), indicated that this type of group meets only to conduct business and does not have programs as such. These surveys also were not returned. Excluding surveys sent as a courtesy, the overall response rate was 80 percent.

The 4 organizations that returned the survey and were no longer functioning were removed from the sample. The 2 senior citizen groups that returned the survey, and 1 organization that did not identify itself by name or category, were not included in statistical analyses by organization, but were included in overall analyses. Final

analyses were therefore performed on a sample size of 114 organizations by category, and 117 organizations overall. See Appendix C for a summary of survey responses by organization.

Profile of Organizations, Members, and Meetings

Demographic characteristics of the members varied among organizations. All environmental groups were composed of a mixture of both male and female members (Table 2). Neighborhood and education organization members were also both males and females, with the exception of 2 groups in each category whose members were mostly or all female. Civic club membership tended to be either predominantly male or female, rather than a mix of males and females within an organization. Garden club members were likely to be women. No age range tended to predominate within the organizations (Table 3).

Only education organizations were likely to have an ethnically mixed membership (Table 4). Civic and garden club memberships were likely to be mostly or all caucasian. Of the neighborhood organizations who responded to the question, 52 percent were mostly or all caucasian, 33 percent were mostly or all black, and 14 percent were ethnically mixed. Eight of the 10 environmental groups were

Table 2. Profile of organizations by gender of members.[a]

Gender	Organization categories					
	Civic (n=31)[b]	Garden (n=21)[b]	Environmental (n=10)	Neighborhood (n=26)[b]	Ed/PTA (n=26)[b]	Total (n=114)[b]
Male	13	0	0	0	0	13
Female	11	14	0	2	2	29
Mixed	6	6	10	20	21	63

[a] Figures represent number of organizations whose members are mostly or all male (i.e., predominantly male), mostly or all female, or both males and females.
[b] Differences between "n" and column totals reflect failure to respond.

Table 3. Profile of organizations by age of members.[a]

Predominant Age of members	Type of organization					
	Civic (n=31)[b]	Garden (n=21)[b]	Environmental (n=10)	Neighborhood (n=26)[b]	Ed/PTA (n=26)[b]	Total (n=114)[b]
18-34	2	0	0	0	0	2
35-54	8	4	6	4	9	31
55 and up	10	11	0	10	0	33
Mixed age	10	5	4	8	13	40

[a] Figures represent number of organizations falling within each age category.
[b] Differences between "n" and column totals reflect failure to respond.

Table 4. Profile of organizations by ethnic group of members.[a]

	Type of organization					
Ethnic group	Civic (n=31)[b]	Garden (n=21)[b]	Environmental (n=10)	Neighborhood (n=26)[b]	Ed/PTA (n=26)[b]	Total (n=114)[b]
Black	0	0	1	7	1	9
Mixed	3	0	1	3	19	26
White	26	19	8	11	3	67

[a] Figures represent number of organizations whose members are most or all black (i.e., predominantly black), most or all white, or ethnically mixed.
[b] Differences between "n" and column totals reflect failure to respond.

predominantly caucasian, one was predominantly black, and one ethnically mixed.

Organizations ranged in size from 6 to 490 members. Education organizations were largest with an average of 222 members. According to program planners' estimates, more people attended the meetings of education groups than all other types of organizations ($p = 0.0001$). Other organizations did not differ in number of members attending meetings. Average attendance at meetings was 42, although education organizations averaged 92 members per meeting.

Average time allowed for the program section of meetings was 30 minutes. Garden clubs allowed more time for programs (between 30 and 45 minutes) than civic clubs ($p = 0.024$), which averaged between 20 and 30 minutes per program. There were no differences in program length among other groups. Most organizations (77 percent) included a question and answer session in the time allowed for the program, or would allow additional time for such a session if needed.

On average, organizations met once a month. Civic clubs met more often than all other types of organizations ($p = 0.001$). Garden clubs met most frequently after civic clubs, and more often than education or neighborhood organizations ($p = 0.001$).

Garden clubs usually met during the week in the

daytime, and neighborhood and education groups met on weekday evenings (Table 5). About 70 percent of civic clubs who responded met on weekday evenings, with the others meeting during the day. Most of the environmental groups who responded also met on weekday evenings.

Popularity of Program Topics

The 35 program topics from Parts 1 and 2 of the survey were ranked in several ways (Table 6), and although the method used sometimes changed the order of popularity within the ranking, there was little difference among most topics and the others ranking close to them in the list. The terms "schedule a program", "choose the topic", and "plan the program" are used synonymously in the overview of topics. Responses of the 2 senior organizations and 1 unidentified organization are included in program popularity calculations.

For this section, percentage of highly likely responses is determined by taking "starred" items into consideration. Percentages are calculated based on 117 organizations. The 4 organizations who responded but were no longer functioning are not included in calculations. Results of analysis of variance (ANOVA) are reported as p-values (i.e., significance levels). Responses among types of

Table 5. Times organizations hold scheduled meetings.[a]

Meeting time	Type of organization					
	Civic (n=31)[b]	Garden (n=21)[b]	Environmental (n=10)	Neighborhood (n=26)[b]	ED/PTA (n=26)[b]	Total (n=114)[b]
Weekday evening	20	2	8	18	21	69
Weekday during day	8	15	1	1	0	25
Weekend evening	0	0	1	0	0	1
Weekend during day	0	3	0	1	0	4

[a] Figures represent number of organizations meeting during each time period.
[b] Differences between "n" and column totals reflect failure to respond.

Table 6. Topics ranked by popularity.

Topic	Popularity ranking[a]				
	>H.L. +H.L.	# Starred	# H.L.	H.L. +S.L.	# N.L.
Recycling	65	54	52	84	16
Understanding air pollution	39	22	30	73	24
Protecting the Roanoke River	38	26	22	76	21
Feeding wildlife in winter	36	24	23	60	34
Identifying birds at the home feeder	34	30	20	57	43
Preserving wildlife habitat	33	19	20	62	37
Protecting groundwater	32	16	28	63	30
Protecting endangered species	31	22	20	57	40
Sharing wildlife activities with children	28	20	17	44	53
Controlling pests safely around the home	27	18	19	55	44
Caring for lawns without chemicals	26	15	23	56	37
Preserving open space	24	10	19	60	34
Sharing nature activities with children	24	19	17	50	48
Identifying and/or growing wildflowers	24	17	19	48	50

Table 6. Continued.

Topic	Popularity ranking				
	>H.L. +H.L.	# Starred	# H.L.	H.L. +S.L.	# N.L.
Identifying and/or growing native plants and trees	23	15	20	49	48
Improving wildlife habitat on private property	23	12	12	50	44
Using native plants to provide food and cover for wildlife	23	12	19	44	51
Organic gardening	21	7	16	50	47
Controlling wildlife pests and/or damage	21	13	12	39	60
Composting organic waste	19	8	16	54	44
Birdwatching	19	12	13	37	62
Woodworking for wildlife (building nesting boxes, feeders, etc.)	18	12	12	32	63
Protecting wildlife from harm (from cats, pesticides, plate glass windows, etc.)	17	11	10	52	47
Landscaping for wildlife	16	10	11	46	49
Exploring local geology	15	8	13	38	61
Identifying wildlife other than birds	14	10	6	38	59

Table 6. Continued.

Topic	Popularity ranking				
	>H.L. +H.L.	# Starred	# H.L.	H.L. +S.L.	# N.L.
Studying ponds and streams	14	6	12	35	61
Exploring the insect world	14	6	11	34	63
Identifying rocks and minerals	12	6	10	29	72
Stargazing	9	7	7	30	63
Identifying and using wild edible plants	9	6	5	29	67
Hunting for fossils	9	3	8	24	73
Photographing wildlife	7	5	2	23	67
Managing ponds for wildlife	6	4	4	22	74
Photographing nature	5	5	1	34	57

[a] Topics ranked in column 1 by combining number of '>highly likely' ratings with 'highly likely' ratings.

>H.L. = number of respondents starring topic and also rating it as highly likely, raising the rating to 'greater than highly likely'

H.L. = number of respondents highly likely to schedule the topic

S.L. = number of respondents somewhat likely to schedule the topic

N.L. = number of respondents not likely to schedule the topic

Starred = number of respondents starring topic as one of three in that section that they were most likely to schedule

organizations are considered significantly different if the p-value is less than or equal to the significance level of 0.05 (discussed in the methods section).

Correlation coefficient results (Pearson's r) are reported as both r and p-values. Correlation coefficients can range from an r-value of -1 to 1. An r-value close to 1 means that the two variables are positively correlated, a correlation coefficient close to -1 means that the two variables are negatively correlated, and a correlation coefficient of zero means there is no correlation between the two variables. When both variables are "truly" numeric, a significant positive correlation indicates that respondents who choose high values of one variable also tend to choose high values of the other variable. For example, an r-value of 0.845 obtained when comparing the variables "sharing wildlife activities with children and "sharing nature activities with children" indicates that respondents who were likely to choose one of the topics also were likely to choose the other.

When dummy variables are used, the only numeric values for that variable are 0 or 1. If the respondent is in the organization being tested, a value of 1 is assigned, otherwise a value of 0 is given. R-values are low because comparisons are relative to all other observations. Consequently, p-values give more useful information when

dummy variables are used. For example, the r-value is not high when correlations are run between garden clubs and the topic "identifying and/or growing native plants and trees" ($r = 0.347$). However, the p-value ($p = 0.0005$) shows a significant positive correlation between the two variables. The results confirm that, relative to other organization types, garden clubs are likely to schedule such a program. An overview of each topic follows.

Recycling.--Fifty-six percent of respondents indicated they were highly likely to schedule a program about recycling. Education and civic organizations were more likely to choose the topic than environmental groups ($p = 0.01$), who were not likely to select it ($r = -0.351$, $p = 0.002$). When recalculations were made using the starred item procedure, civic clubs were also more likely to schedule the topic than garden clubs, and neighborhood organizations were more likely than environmental groups to do so ($p = 0.0002$).

Understanding Air Pollution.--Thirty-three percent of respondents indicated they were highly likely to schedule a program about air pollution. Education associations were more likely to choose the topic than garden clubs ($p = 0.008$). However, when recalculations were made using the starred item procedure, the difference between education and

garden groups was no longer evident. Instead, civic organizations were more likely than garden clubs to schedule the topic ($p = 0.018$).

Protecting the Roanoke River.--Thirty-two percent of respondents indicated they were highly likely to plan a program on protecting the Roanoke River. Education groups were more likely to choose this topic than were garden clubs ($p = 0.042$), although this difference was no longer significant if recalculations were made using the starred item procedure ($p = 0.064$).

Feeding Wildlife in Winter.--Thirty-one percent of respondents were highly likely to schedule this program. There were no significant differences among organizations ($p = 0.079$), and no significant correlations between the topic and organizations.

Identifying Birds at the Home Feeder.--Twenty-nine percent of respondents were highly likely to choose this topic, which was chosen by garden clubs more often than environmental organizations ($p = 0.008$). When calculations were made using the starred item procedure, garden clubs were also more likely to choose the topic than civic organizations ($p = 0.006$).

Preserving Wildlife Habitat.--Twenty-eight percent of respondents were highly likely to choose this topic, and organizations did not differ in likelihood to choose it ($p =$

0.359). However, when recalculations were made using the starred item procedure, environmental groups were more likely than garden clubs to schedule a wildlife habitat program ($p = 0.04$).

Protecting Groundwater.--Twenty-seven percent of respondents indicated a high likelihood to schedule a program about ground water. There were no differences among organizations on this topic ($p = 0.29$) and no significant correlations of organizations to topic.

Protecting Endangered Species.--Twenty-six percent of organizations were highly likely to schedule a program on endangered species. Although an ANOVA indicated differences existed among organizations ($p = 0.043$), a Tukey's Studentized Range Test failed to locate the differences. When recalculations were made using the starred item procedure ($p = 0.035$), education groups were more likely to choose the topic than garden clubs

Sharing Wildlife Activities with Children.--Twenty-four percent of respondents indicated a high likelihood to plan programs that involved sharing wildlife activities with children. Education organizations were more likely than all other groups to request this programs ($p = 0.0001$). Civic clubs were not likely to plan a program on sharing wildlife activities with children ($r = -0.249$, $p = 0.0148$).

Controlling Pests Safely Around the Home.--Twenty-three

percent of respondents indicated high interest in a program on safe control of pests around the home. There was a positive correlation between neighborhood organizations and the topic ($r = 0.339$, $p = 0.0006$). Neighborhood groups were also more likely than other organizations except garden clubs to select the topic ($p = 0.002$).

Caring for Lawns without Chemicals.--Twenty-two percent of respondents were highly likely to schedule a program related to lawn care without chemicals. There was a positive correlation between neighborhood organizations and likelihood to choose this program ($r = 0.296$, $p = 0.004$). Neighbor groups were also more likely to choose the topic than environmental or education groups ($p = 0.001$). Education groups were not likely to plan a program on caring for lawns without chemicals ($r = -0.264$, $p = 0.01$).

Preserving Open Space.--Twenty-one percent of respondents said they were highly likely to arrange a program on open space preservation. There were no differences among organizations ($p = 0.075$) and no significant correlations between the topic and the organizations.

Sharing Nature Activities with Children.--Twenty-one percent of respondents indicated a high likelihood to plan a program about sharing nature activities with children. Education organizations were more likely than all other

groups to request this topic ($p = 0.0001$). Garden clubs were not likely to schedule a program about sharing nature activities with children ($r = -0.281$, $p = 0.005$).

Identifying and/or Growing Wildflowers.--Twenty-one percent of respondents said they were highly likely to schedule a program about wildflowers. Garden clubs were more likely to schedule a wildflower program then all other types of organizations ($p = 0.0001$)

Identifying and/or Growing Native Plants and Trees.--Twenty percent of respondents indicated they were highly likely to schedule a program about native plants. Garden clubs were more likely to choose the topic than other organizations except education groups ($p = 0.0001$). Education associations were more likely to plan the program than civic or environmental groups ($p = 0.0001$), although the difference between education and environmental groups was no longer significant when recalculations were made using the starred item procedure ($p = 0.0001$). Civic clubs were not likely to schedule a program on native plants ($r = 0.328$, $p = 0.001$).

Improving Wildlife Habitat on Private Property.--Twenty percent of respondents were highly likely to schedule a program on habitat improvement on private property. There were no significant differences among groups ($p = 0.178$), and no significant correlations between organizations and

the topic.

Using Native Plants to Provide Food and Cover for Wildlife.--Twenty percent of organizations were highly likely to schedule a program about using native plants to provide food and cover for wildlife. There was a positive correlation between garden clubs and the topic ($r = 0.301$, $p = 0.003$), and garden clubs were more likely to schedule the program than civic clubs ($p = 0.003$), which were not likely to request it ($r = -0.3$, $p = 0.003$). Education organizations were also more likely than civic clubs to plan this program ($p = 0.003$). When recalculations were made using the starred item procedure, garden clubs were more likely to plan a program on using native plants as food and cover for wildlife than all other organizations. With the weight included, education groups were no longer more likely to choose the topic than civic clubs ($p = 0.0001$).

Organic Gardening.--Eighteen percent of respondents indicated they were highly likely to schedule a program about organic gardening. There were no significant differences among groups ($p = 0.13$), and no significant correlations between organizations and the topic.

Controlling Wildlife Pests and/or Damage.--Eighteen percent of respondents indicated high interest in a program on wildlife pests. Neighborhood groups were more likely to choose the topic than civic groups ($p = 0.01$), who were not

likely to schedule the program ($r = -0.258$, $p = 0.01$). When recalculations were made using the starred item procedure, neighborhood organizations were also more likely to schedule a program on wildlife pest control than environmental or education groups ($p = 0.001$).

Composting Organic Waste.--Sixteen percent of respondents indicated they were highly likely to schedule a program about composting organic wastes. There were no significant differences among groups ($p = 0.072$), and no significant correlations between organizations and the topic.

Birdwatching.--Sixteen percent of respondents were highly likely to choose a program about birdwatching. There was a positive correlation between garden clubs and the topic ($r = 0.248$, $p = 0.014$). Although an ANOVA indicated differences existed among organizations ($p = 0.016$), a Tukey's Studentized Range Test failed to locate the differences.

Woodworking for Wildlife.--Fifteen percent of respondents were highly likely to schedule a program related to woodworking for wildlife. Education groups were more likely to schedule a woodworking program than civic or garden clubs ($p = 0.011$), although the difference between education and civic groups was no longer significant if recalculations were made using the starred item procedure (p

= 0.018).

Protecting Wildlife from Harm.--Fifteen percent of respondents were highly likely to schedule a program about protecting wildlife from dangers such as cats, pesticides, plate glass windows, etc. There was a significant correlation between education associations and likelihood to select the topic ($r = 0.285$, $p = 0.005$), but there were no significant differences among groups ($p = 0.09$).

Landscaping for Wildlife.--Fourteen percent of respondents were highly likely to plan a program on landscaping for wildlife. There were no significant correlations between the topic and organizations. However, garden and education groups were more likely to plan a landscaping program than neighborhood organizations ($p = 0.008$). When calculations were made using the starred item procedure, the difference between education and neighborhood organizations was not found ($p = 0.02$).

Exploring Local Geology.--Thirteen percent of respondents said they were highly likely to schedule a program on local geology. Education groups were more likely than all other organizations to schedule the topic ($p = 0.0001$).

Identifying Wildlife other than Birds.--Twelve percent of respondents were highly likely to schedule a program on identifying other wildlife. There was a positive

correlation between education groups and this program ($r = 0.391$, $p = 0.0001$). Civic clubs were not likely to choose it ($r = -0.286$, $p = 0.005$).

Studying ponds and streams.--Twelve percent of respondents were highly likely to schedule a program about ponds and streams. Education organizations were more likely to schedule the program than other organizations except environmental groups ($p = 0.0001$). Civic clubs ($r = -0.35$, $p = 0.005$) and garden clubs ($r = -0.3$, $p = 0.003$) were not likely to choose a program on ponds and streams.

Exploring the Insect World.--Twelve percent of respondents indicated they were highly likely to schedule a program about insects. Education groups were most likely to choose this topic ($p = 0.0001$), and civic clubs were not likely to select it ($r = -0.379$, $p = 0.0001$).

Identifying Rocks and Minerals.--Ten percent of respondents indicated they were highly likely to schedule a program on rocks and minerals. Education groups were more likely to plan this program than all other organizations ($p = 0.0001$). Civic groups were not likely to schedule a program on the topic ($r = -0.3$, $p = 0.002$).

Stargazing.--Eight percent of respondents were highly likely to plan a stargazing program. Education organizations were more likely to schedule the topic than all other organizations ($p = 0.0001$). Garden clubs were not

likely to schedule the program ($r = -0.285$, $p = 0.006$).

Identifying and Using Wild Edible Plants.--Eight percent of respondents were highly likely to schedule a program about wild edible plants. Civic clubs, who were not likely to plan a program on edible plants ($r = -0.287$, $p = 0.005$), were less likely to do so than education or garden groups ($p = 0.018$). There was not a significant difference between civic and education organizations when calculations were made using the starred item procedure ($p = 0.024$).

Hunting for fossils.--Eight percent of respondents were highly likely to schedule a program on fossils. Education groups were more likely to plan a fossil program than all other organizations ($p = 0.0001$). Civic clubs were not likely to plan a fossil program ($r = -0.288$, $p = 0.004$).

Photographing Wildlife.--Six percent of respondents indicated high interest in a program on wildlife photography. There were no significant differences among organizations ($p = 0.15$), although there was a positive correlation between education organizations and the topic ($r = 0.266$, $p = 0.012$).

Managing Ponds for Wildlife.--Five percent of organizations expressed high interest in a program on managing ponds for wildlife. There was a positive correlation with education groups ($r = 0.308$, $p = 0.003$), which were more likely than garden or civic clubs to

schedule the topic ($p = 0.024$). However, no differences among groups were evident when the starred item procedure was included in calculations ($p = 0.079$).

Photographing Nature.--Four percent of respondents indicated a high interest in a program on nature photography. There were no significant differences among organizations ($p = 0.176$), and no significant correlations between organizations and the topic.

Organizations' Interests in Topics

Seventy-seven percent of civic clubs indicated they were highly likely to schedule a program on recycling (Table 7). There were no other programs that 50 percent or more of the civic groups were highly likely to schedule. Understanding air pollution, protecting the Roanoke River, and preserving wildlife habitat were topics that were popular with about 40 percent of the civic clubs. On 22 of the 35 suggested topics, more than 50 percent of the civic club program planners indicated they were not likely to schedule the program.

Sixty-seven percent of garden club planners indicated they were likely to schedule programs about identifying and growing wildflowers (Table 8). Garden clubs also demonstrated an interest in programs on identifying birds at

Table 7. Civic club interest in program topics.

Topic	Percent Likely[a]	Percent Not likely[b]	Correlation Coefficients[c]	p Values
Recycling	77	6	0.15632	0.1223
Understanding air pollution	42	13	0.06364	0.5379
Protecting the Roanoke River	42	10	0.01533	0.8821
Feeding wildlife in winter	32	29	-0.08137	0.4406
Identifying birds at the home feeder	16	52	-0.20769	0.0402
Preserving wildlife habitat	39	29	0.00547	0.9576
Protecting groundwater	29	19	0.07053	0.5041
Protecting endangered species	23	39	-0.11871	0.2519
Sharing wildlife activities with children	13	61	-0.24937	0.0148
Controlling pests safely around the home	23	39	-0.07198	0.4812
Caring for lawns without chemicals	23	26	0.04369	0.6702
Preserving open space	10	32	-0.14029	0.1799
Sharing nature activities with children	10	55	-0.24662	0.0149
Identifying/growing wildflowers	10	65	-0.29837	0.0028
Identifying/growing native plants	6	68	-0.32797	0.0010

Table 7. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Improving wildlife habitat on private property	19	52	-0.18891	0.0713
Using native plants to provide food and cover for wildlife	6	68	-0.30018	0.0033
Organic gardening	3	45	-0.16630	0.1054
Controlling wildlife pests and/or damage	10	71	-0.25829	0.0106
Composting organic waste	6	35	-0.10886	0.2885
Birdwatching	10	65	-0.17177	0.0925
Woodworking for wildlife	10	58	-0.13034	0.2130
Protecting wildlife from harm	13	45	-0.08950	0.3833
Landscaping for wildlife	10	52	-0.15653	0.1340
Exploring local geology	6	58	-0.14593	0.1516
Identifying wildlife other than birds	6	74	-0.28605	0.0050
Studying ponds and streams	0	74	-0.34961	0.0005
Exploring the insect world	0	81	-0.37923	0.0001
Identifying rocks and minerals	0	84	-0.30021	0.0024

Table 7. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Stargazing	3	55	-0.10478	0.3202
Identifying/using wild edible plants	0	74	-0.28690	0.0048
Hunting for fossils	0	81	-0.28818	0.0044
Photographing wildlife	3	68	-0.14382	0.1813
Managing ponds for wildlife	6	74	-0.15269	0.1418
Photographing nature	3	58	-0.14624	0.1666

[a] Percent of planners indicating their organization was "highly likely" to schedule the topic. A topic with a "somewhat likely" rating that was also starred (i.e., chosen as one of three most likely to be scheduled), was also placed in this category.
[b] Percent of planners who said they were not likely to schedule the topic.
[c] Pearson correlation coefficients measuring the relationship between civic organizations and each topic.

Table 8. Garden club interest in program topics.

Topic	Percent Likely[a]	Percent Not likely[b]	Correlation Coefficients[c]	p Values
Recycling	38	19	-0.13320	0.1887
Understanding air pollution	10	33	-0.31402	0.0018
Protecting the Roanoke River	5	29	-0.26777	0.0084
Feeding wildlife in winter	33	29	0.02421	0.8188
Identifying birds at the home feeder	57	24	0.21193	0.0362
Preserving wildlife habitat	14	48	-0.16084	0.1155
Protecting groundwater	29	19	-0.18639	0.0752
Protecting endangered species	10	48	-0.16135	0.1183
Sharing wildlife activities with children	0	57	-0.22617	0.0275
Controlling pests safely around the home	19	24	0.09667	0.3437
Caring for lawns without chemicals	29	24	0.12317	0.2421
Preserving open space	10	43	-0.21749	0.0362
Sharing nature activities with children	0	67	-0.28095	0.0053
Identifying/growing wildflowers	67	10	0.53675	0.0001
Identifying/growing native plants	48	19	0.34652	0.0005

Table 8. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Improving wildlife habitat on private property	24	43	-0.02508	0.8124
Using native plants to provide food and cover for wildlife	52	19	0.30082	0.0032
Organic gardening	33	29	0.13904	0.1767
Controlling wildlife pests and/or damage	24	52	0.00760	0.9411
Composting organic waste	24	29	0.11726	0.2527
Birdwatching	38	38	0.24771	0.0144
Woodworking for wildlife	5	71	-0.17256	0.0981
Protecting wildlife from harm	10	52	-0.11005	0.2832
Landscaping for wildlife	29	24	0.21496	0.0385
Exploring local geology	0	71	-0.23384	0.0205
Identifying wildlife other than birds	24	38	0.05051	0.6269
Studying ponds and streams	0	81	-0.29952	0.0032
Exploring the insect world	0	67	-0.19607	0.0556
Identifying rocks and minerals	5	76	-0.15812	0.1161

Table 8. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Stargazing	0	86	-0.28460	0.0060
Identifying/using wild edible plants	14	38	0.18577	0.0715
Hunting for fossils	0	86	-0.22360	0.0285
Photographing wildlife	0	57	-0.06677	0.5365
Managing ponds for wildlife	0	81	-0.16148	0.1200
Photographing nature	5	67	-0.11216	0.2898

[a] Percent of planners "highly likely" to schedule the topic. A topic with a "somewhat likely" rating that was also starred (i.e., chosen as one of three most likely to be scheduled), was also placed in this category.
[b] Percent of planners not likely to schedule the topic.
[c] Pearson correlation coefficients measuring the relationship between garden clubs and each topic.

the home feeder, and identifying, growing, and using native plants. When starred items were included in calculations, there was a positive correlation between garden clubs and likelihood to schedule a program on landscaping for wildlife ($r = 0.257$, $p = 0.013$). However, only 29 percent of respondents indicated they were highly likely to schedule such a program. Garden clubs were not likely to schedule programs on sharing nature or wildlife activities with children, woodworking for wildlife, controlling wildlife pests, protecting wildlife from harm, photographing nature or wildlife, insects, rocks and minerals, fossils, stargazing, or ponds and streams.

Environmental organizations who responded to the survey were not likely to plan most of the topics. Fifty percent or more of the environmental groups indicated they were not likely to schedule 29 of the 35 possible topics. Four topics were likely to be chosen by 4 of the 10 responding environmental groups (protecting ground water, protecting the Roanoke River, preserving open space, and protecting endangered species). Five of the groups indicated high interest in improving wildlife habitat on private property and 6 were likely to schedule a general program on preserving wildlife habitat. Because of the small sample size and the diversity within the environmental category, a table of percentages was not considered appropriate for

environmental organizations.

More than half of the neighborhood groups indicated high interest in a program on recycling (Table 9). Relative to other organizations, neighborhood groups were also likely to schedule programs on caring for lawns without chemicals ($r = 0.296$, $p = 0.004$), controlling pests safely around the home ($r = 0.339$, $p = 0.0006$), and controlling wildlife pests and/or damage ($r = 0.318$, $p = 0.002$). However, 42 percent or fewer of the neighborhood groups indicated a high interest in these topics. In general, neighborhood organizations did not express a strong interest in the program topics.

In relation to other groups, education organizations showed interest in the greatest number of topics, with a significant positive correlation to 14 of the 35 topics (Table 10). Recycling and sharing nature and wildlife activities with children received the highest marks from education organizations. Fifty percent of the education organizations also indicated they would be highly likely to select a program on understanding air pollution or exploring the insect world. Education groups were not likely to choose programs on controlling pests (wildlife or otherwise), caring for lawns without chemicals, edible plants, or managing ponds for wildlife.

Table 9. Neighborhood organization interest in program topics.

Topic	Percent Likely[a]	Percent Not likely[b]	Correlation Coefficients[c]	p Values
Recycling	54	4	0.03146	0.7572
Understanding air pollution	35	8	0.08816	0.3930
Protecting the Roanoke River	31	15	-0.01617	0.8758
Feeding wildlife in winter	27	19	0.02421	0.8188
Identifying birds at the home feeder	23	31	-0.03313	0.7461
Preserving wildlife habitat	23	23	-0.00779	0.9396
Protecting groundwater	38	15	0.14121	0.1794
Protecting endangered species	19	35	-0.07891	0.4472
Sharing wildlife activities with children	12	42	-0.13782	0.1829
Controlling pests safely around the home	42	19	0.33885	0.0006
Caring for lawns without chemicals	38	8	0.29584	0.0042
Preserving open space	27	12	0.13785	0.1876
Sharing nature activities with children	4	31	-0.08590	0.4028
Identifying/growing wildflowers	4	46	-0.17317	0.0882
Identifying/growing native plants	12	38	-0.09461	0.3566

Table 9. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Improving wildlife habitat on private property	12	23	-0.05577	0.5975
Using native plants to provide food and cover for wildlife	8	38	-0.09749	0.3499
Organic gardening	27	27	0.16671	0.1045
Controlling wildlife pests and/or damage	35	19	0.31677	0.0016
Composting organic waste	27	19	0.20084	0.0486
Birdwatching	8	54	-0.15767	0.1230
Woodworking for wildlife	19	35	0.05720	0.5860
Protecting wildlife from harm	8	35	-0.05278	0.6076
Landscaping for wildlife	4	46	-0.24033	0.0203
Exploring local geology	4	58	-0.17582	0.0833
Identifying wildlife other than birds	4	50	-0.10251	0.3229
Studying ponds and streams	8	35	0.06157	0.5534
Exploring the insect world	4	42	-0.01688	0.8703
Identifying rocks and minerals	0	58	-0.13136	0.1927

Table 9. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Stargazing	0	50	-0.12680	0.2284
Identifying/using wild edible plants	4	46	0.00909	0.9303
Hunting for fossils	0	58	-0.12839	0.2125
Photographing wildlife	4	50	-0.08137	0.4511
Managing ponds for wildlife	0	46	-0.06250	0.5496
Photographing nature	0	35	0.09185	0.3865

[a] Percent of planners indicating their organization was "highly likely" to schedule the topic. A topic with a "somewhat likely" rating that was also starred (i.e., chosen as one of three most likely to be scheduled), was also placed in this category.
[b] Percent of planners who said they were not likely to schedule the topic.
[c] Pearson correlation coefficients measuring the relationship between neighborhood organizations and each topic.

Table 10. PTA/Education organization interest in program topics.

Topic	Percent Likely[a]	Percent Not likely[b]	Correlation Coefficients[c]	p Values
Recycling	65	12	0.12962	0.2010
Understanding air pollution	50	19	0.20333	0.0469
Protecting the Roanoke River	46	15	0.23652	0.0203
Feeding wildlife in winter	46	19	0.20487	0.0501
Identifying birds at the home feeder	38	19	0.19864	0.0499
Preserving wildlife habitat	23	31	0.02770	0.7877
Protecting groundwater	27	27	0.00797	0.9399
Protecting endangered species	46	19	0.29427	0.0038
Sharing wildlife activities with children	77	15	0.61115	0.0001
Controlling pests safely around the home	8	54	-0.20552	0.0423
Caring for lawns without chemicals	8	50	-0.26391	0.0110
Preserving open space	31	27	0.15476	0.1385
Sharing nature activities with children	65	12	0.61780	0.0001
Identifying/growing wildflowers	15	35	0.09499	0.3522
Identifying/growing native plants	27	19	0.23560	0.0202

Table 10. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Improving wildlife habitat on private property	31	35	0.14537	0.1668
Using native plants to provide food and cover for wildlife	27	38	0.15969	0.1242
Organic gardening	19	46	-0.01625	0.8752
Controlling wildlife pests and/or damage	12	54	0.02131	0.8359
Composting organic waste	15	46	-0.05317	0.6050
Birdwatching	23	38	0.17329	0.0896
Woodworking for wildlife	31	38	0.33276	0.0011
Protecting wildlife from harm	27	23	0.28493	0.0047
Landscaping for wildlife	23	35	0.22456	0.0305
Exploring local geology	42	19	0.55424	0.0001
Identifying wildlife other than birds	23	27	0.39103	0.0001
Studying ponds and streams	38	23	0.52707	0.0001
Exploring the insect world	50	23	0.59317	0.0001
Identifying rocks and minerals	38	23	0.60201	0.0001

Table 10. Continued.

Topic	Percent Likely	Percent Not likely	Correlation Coefficients	p Values
Stargazing	27	23	0.55.85	0.0001
Identifying/using wild edible plants	15	58	0.18458	0.0733
Hunting for fossils	31	23	0.63920	0.0001
Photographing wildlife	12	46	0.26575	0.0123
Managing ponds for wildlife	12	50	0.30760	0.0026
Photographing nature	0	31	0.21412	0.0415

[a] Percent of planners indicating their organization was "highly likely" to schedule the topic. A topic with a "somewhat likely" rating that was also starred (i.e., chosen as one of three most likely to be scheduled, was also placed in this category.
[b] Percent of planners who said they were not likely to schedule the topic.
[c] Pearson correlation coefficients measuring the relationship between PTA/Education organizations and each topic.

Environmental Topics Compared to Wildlife Topics

Results did not support the hypothesis that wildlife topics would appeal to groups more than environmental/nature topics. Instead, there was a high correlation ($r = 0.77$, $p = 0.0001$) between the overall mean of part 1 (the topics related to nature and/or the environment), and the mean response for part 2 (topics related to wildlife). Individual questions were also correlated (Table 11), and, with 1 exception, received within 1 point the same number of highly likely responses as their corresponding question (e.g.,sharing nature activities with children compared with sharing wildlife activities with children). In one case (managing ponds for wildlife compared to studying ponds and streams), the non-wildlife oriented topic received more positive responses than the topic specifically related to wildlife, although neither topic was very popular. Based on response to the question "About what type of wildlife would you be likely to schedule a program?", more than one third of respondents (37 percent) indicated they were not likely to schedule a program about wildlife.

Types of Wildlife of Interest for Programs

The following discussion is based on responses to Part

Table 11. Comparison of nature/environmental topics to wildlife topics.

	Topic	Mean Response[a]	Number of Highly Likely Responses	Correlation A to B[b]
A	Using native plants to provide food and cover for wildlife	2.2127	20	r = 0.62747 p = 0.0001
B	Identifying/growing native plants/trees	2.1340	19	
A	Sharing wildlife activities with children	2.1473	18	r = 0.84490 p = 0.0001
B	Sharing nature activities with children	2.12371	17	
A	Photographing wildlife	2.68182	2	r = 0.67782 p = 0.0001
B	Photographing nature	2.58242	1	
A	Managing ponds for wildlife	2.69149	4	r = 0.43418 p = 0.0001
B	Studying ponds and streams	2.44211	12	
A	Preserving wildlife habitat	1.95876	20	r = 0.50056 p = 0.0001
B	Preserving open space	2.04301	19	

[a] Based on scores of 1 = highly likely, 2 = somewhat likely, and 3 = not likely (i.e., the lower the mean, the more popular the topic).
[b] Believed to be a related topic.

2, Section D, questions 1-5 of the survey ("About what type of wildlife would you be likely to schedule a program?"):

Wildlife that members might see around their homes or neighborhoods was chosen as a likely program by 52 percent of respondents, and received about 2 to 3 times the level of interest as other types of wildlife (Table 12). Education organizations, with 77 percent of their planners indicating interest in this type of wildlife program, were more likely to choose it than neighborhood or environmental groups ($p = 0.008$).

Twenty-eight percent of respondents indicated interest in a program about endangered species. More than half (58 percent) of these were education organizations. Nineteen percent of organizations said they would be likely to schedule a program on wildlife found in parks and refuges. Education organizations were likely to schedule both types of programs (for parks and refuges $r = 0.428$, $p = 0.0001$; for endangered species $r = 0.366$, $p = 0.0001$) and were more likely than others except environmental groups to do so (for endangered species $p = 0.0002$; for wildlife found in parks and refuges $p = 0.0001$).

Eighteen percent of respondents were likely to schedule a program about wildlife pests and how to deal with them. Garden clubs and neighborhood organizations made up 67 percent of this group. Thirty-seven percent of program

Table 12. Number of organizations likely to schedule a program about each type of wildlife.[a]

Types of wildlife	Organization Categories					
	Civic (n=31)	Garden (n=21)	Environmental (n=10)	Neighborhood (n=26)	Ed/PTA (n=26)	Total n=(114)
Wildlife around homes or neighborhoods	15	13	2	10	20	61
Endangered species	6	4	5	2	15	32
Wildlife found in parks and refuges	2	2	3	2	13	22
Wildlife pests and how to deal with them	4	8	0	6	3	21
Not likely to schedule a program about wildlife	12	6	4	14	5	42

[a] Respondents were allowed to choose more than 1 answer.

planners were not likely to schedule a program on any type of wildlife.

Presentation Preference for Programs

Twenty-nine percent of respondents indicated they were highly likely to schedule a slide presentation about nature, wildlife and/or the environment, and 17 percent indicated the same level of interest in a movie or video (Table 13). Although an ANOVA indicated differences existed among organizations in likelihood to schedule a slide presentation ($p = 0.034$), a Tukey's Studentized Range Test failed to locate the differences. There were no differences among organizations in likelihood to schedule a movie or video ($p = 0.47$).

Civic clubs were not likely to schedule a guided nature walk ($r = -0.261$, $p = 0.013$), a field trip ($r = -0.386$, $p = 0.001$), or a 1-session workshop ($r = -0.326$, $p = .002$) (Table 14). Garden clubs were likely to plan a slide presentation/talk ($r = 0.278$, $p = 0.006$), and education associations were likely to schedule a field trip ($r = 0.403$, $p = 0.001$).

Twenty-three percent of respondents were likely to schedule a field trip, 16 percent to schedule a guided nature walk, and 13 percent to schedule a one-session

Table 13. Number of organizations likely to schedule each type of program (n=108)[a].

Type of program	Likelihood of scheduling program			
	Highly Likely	Somewhat Likely	Highly Likely + Somewhat Likely	Not Likely
Slide presentation	34	45	79	18
Field trip	27	23	50	45
Movie or video	21	46	67	27
Guided nature walk	18	23	41	50
One-session workshop	16	36	52	38

[a] Does not include surveys returned but not completed.

Table 14. Types of programs that types of organizations are likely to schedule.

Type of program	Type of organization									
	Civic		Garden		Environmental		Neighborhood		Ed/PTA	
	Likelihood of scheduling each type of program.[a]									
	H.L.	N.L.	H.L.	N.L.	H.L.	N.L.	H.L.	N.L.	H.L.	N.L.
Slide presentation	10	3	11	1	1	2	6	6	5	5
Field trip	2	21	6	5	2	6	0	6	16	7
Movie or video	4	6	6	3	1	4	3	6	6	7
Guided nature walk	1	18	4	5	2	7	1	11	10	8
One-session workshop	1	17	3	5	1	1	2	8	8	6

[a] H.L. = number highly likely to schedule the type of program
N.L. = number not likely to schedule the type of program
'Somewhat likely' and 'not sure' responses not included in table.

workshop. Education organizations were more likely than civic or neighborhood groups to schedule a guided nature walk ($p = 0.004$), and more likely than civic organizations to plan a one-session workshop ($p = 0.008$). Civic clubs were less likely than garden clubs or education associations to schedule a field trip for a program ($p = 0.0001$). Neighborhoods were also less likely than education associations to schedule a field trip ($p = 0.0001$).

Willingness to Pay for Programs

Over half of the responding organizations were either not willing to pay for a program, or not sure if their organization would pay a minimal fee to help cover program expenses (Table 15). Garden clubs were willing to pay more than civic, environmental, or neighborhood organizations ($p = 0.0001$). Education organizations were willing to pay more than neighborhood groups ($p = 0.0001$), but not significantly more than other organizations.

Information Dissemination

Seventy-eight percent of respondents indicated they were likely to learn of programs offered through the local newspaper (Table 16). Other media were indicated as likely

Table 15. Number of organizations willing to pay for a presentation.

	Type of organization					
Amount willing to pay	Civic (n=31)	Garden (n=21)	Environmental (n=10)	Neighborhood (n=26)	Ed\PTA (n=26)	Total (n=117)
Not willing to pay	19	3	4	11	7	45
Not sure	4	1	5	6	5	21
Up to $9	1	3	0	3	2	9
$10-$14	3	4	0	0	1	8
$15-$19	0	5	0	1	1	7
$20-$25	2	3	1	0	6	13

Table 16. Media through which organizations are most likely to learn of programs offered to the public.[a]

Medium	Type of organization					
	Civic (n=31)	Garden (n=21)	Environmental (n=10)	Neighborhood (n=26)	Ed/PTA (n=26)	Total (n=117)[b]
Local newspaper	23	17	10	19	21	92
Announce-ments on local TV	13	12	6	12	10	55
Adult education brochure	12	10	4	8	10	44
Local radio station	9	8	6	10	8	42
Park system newsletter	10	8	4	9	7	38

[a] Respondents were asked to circle all of the media where they were likely to hear about programs offered, allowing for more than one answer.

[b] Includes 2 senior citizen organizations and one organization of unknown type.

places to learn of available programs by 33 to 46 percent of the respondents. Organizations did not differ on how they would most likely read or hear about programs offered to the public (for newspapers $p = 0.454$; for radio $p = 0.478$; for television $p = 0.633$; for adult education brochure $p = 0.851$; and for park system newsletter $p = 0.924$).

Current Programs Compared to Possible Future Programs

Forty-five percent of responding organizations had less than one program a year specifically related to nature, wildlife, and/or the environment (Table 17). Forty-four percent indicated their organization would schedule more environmental education programs than they currently had if programs were made readily available at no cost (Table 18). Civic, neighborhood, and education organizations demonstrated the greatest potential increase in environmental programs ($p = 0.0001$). Environmental groups already had more programs specifically related to nature, wildlife, and/or the environment during a year than all other organizations ($p = 0.0001$), and, along with garden clubs, did not demonstrate a large potential increase in programs.

Table 17. Frequency of current environmental programs by organization.

Frequency of programs	Type of organization					
	Civic (n=31)	Garden (n=21)	Environmental (n=10)	Neighborhood (n=26)	Ed/PTA (n=26)	Total (n=114)[a]
<1/year	12	5	3	13	18	51
1-2/year	13	7	2	5	3	30
3-5/year	2	5	0	0	0	7
6-8/year	0	2	1	0	0	3
9 or > /year	0	0	0	0	0	0
All programs	0	0	4	0	2	6

[a] Excludes seniors and organization of unknown category.

Table 18. Number and percent of organizations by category indicating demand for future environmental education programs if they are free and readily available.[a]

Type of organization	Future environmental programs (in relation to present programs)			
	Fewer[b]	Same[c]	More[d]	Already 100%[e]
Civic	0 0.00	10 0.32	17 0.55	0 0.00
Garden	1[f] 0.05	13 0.62	2 0.10	0 0.00
Environmental	0 0.00	5 0.50	1 0.10	4 0.40
Neighborhood	0 0.00	4 0.15	14 0.54	0 0.00
Ed/PTA	0 0.00	5 0.19	16 0.62	2 0.08
Total	1 0.01	37 0.32	50 0.44	6 0.05

[a] Trends in environmental education programs were calculated by comparing the number of programs respondents indicated they already had, to the number they later said they would have if programs were made readily available at no cost. If a respondent failed to answer one or both of the questions related to current and future environmental programs, they were omitted from frequency counts, but included in the denominator to calculate percentages.

[b] Number of clubs with fewer environmental education programs in the future if they are free and readily available.

[c] Number of clubs with the same number of programs.

[d] Number of clubs that would have more environmental education programs in the future if they are free and readily available.

[e] Number of clubs with all current programs related to the environment.

[f] May reflect a misunderstanding of the questions rather than a belief that the organization would have fewer environmental education programs if they were made readily available at no cost.

Discussion

Survey

Survey Response Rate.--The 75 percent survey response rate met expectations based on studies using similar methods. According to Dillman (1978), response rates average 77 percent for studies using his Total Design Method in complete detail, and 71 percent for those who use it in part. Because of financial constraints, a final mailing of a certified letter to all nonrespondents was omitted. The high response rate in spite of the omission can probably be attributed to the local nature of the survey (i.e., coming from a local agency, the Roanoke City Department of Parks and Recreation), the advantage of being able to contact presidents by telephone to obtain program planners' names and addresses, and the fact that respondents possibly served to gain through the provision of programs to their organization.

Based on the large proportion of surveys returned but not completed in response to the follow-up mailing, and on the poor response to 'courtesy' mailings, it appears that organizations that did not respond to the survey were in many cases either no longer active, not likely to schedule

environmental and/or wildlife programs, or not likely to have programs as part of their regularly scheduled meetings. Because all study objectives are related to organizations that would schedule environmental and/or wildlife programs, non-response bias does not appear to be a problem. Because there was a high response rate for all types of organizations, the survey responses are considered to be representative of the civic, garden, neighborhood, and education organizations in the Roanoke Valley that might schedule programs related to wildlife and/or the environment. There were too few senior citizen organizations to draw conclusions about them. Conclusions about environmental groups must be made with caution because of small sample size and considerable diversity within the category. Six of the 10 responding environmental groups could also be considered hobby groups (e.g., beekeepers, wildflower society, bird club, trail club), and conceivably could limit their programs to topics specifically related to their hobbies.

Reliability of Data.--Responses to surveys were a reflection, at least in part, of the individual program planner, and would be expected to vary as an organization changed planners. However, responses were expected to reflect the programs that a planner would be likely to choose for their organization that year. Two surveys from

members of the same organization are probably illustrative of the variability among planners. One respondent for an education organization chose to mark her survey with pens of two colors, indicating programs she would choose for the PTA for which she planned programs, and for the garden club for which she was the president-elect (resulting in 2 surveys from the same club). About 40 percent of her answers were the same as those of the program chair for the same garden club, and the two respondents starred the same three wildlife programs (from a choice of 15) as the ones they would most likely choose for their garden club. On the remainder of the survey, some answers varied only slightly (e.g., a 'not likely' response compared to 'not sure'), while others were quite different. For example, the current planner was not likely to schedule a 1-session workshop or a movie or video, and the incoming president was highly likely to schedule both. The person who answered for 2 groups gave the same response for both organizations on only 17 percent of the questions, demonstrating that planners seemed to be attempting to discriminate in terms of expressing their clubs' needs.

A cross-check of responses indicated that people seemed to answer consistently throughout the survey, supporting reliability of the data. With the exception of 4 respondents, when planners starred the 3 topics in parts 1

and 2 that they were most likely to schedule for their organization, they chose ones they had assigned the highest ratings. Only 1 person who said their organization would not be willing to pay a minimal fee for a presentation chose an amount ($5-$9) when asked specifically how much they would be willing to spend (rather than indicating again that they would not be willing to pay for a program). Only 1 person indicated that she would schedule fewer environmental programs than she currently schedules if they were made readily available at no cost. (This trend in environmental programs was calculated by comparing the number of programs respondents indicated they already had to the number they later said they would have if programs were made readily available at no cost [see Table 18].) Programs with similar content received an equal number of 'highly likely' responses (e.g., sharing nature activities with children and sharing wildlife activities with children; composting organic waste and organic gardening), further supporting consistency of responses.

Factors Influencing Program Choice

Apparent demographic influences on program choices did not withstand further scrutiny. For example, there was a significant correlation between groups whose members were

mostly women and likelihood to meet during the day ($r = 0.523$, $p = 0.0001$), and to choose programs such as identifying wildflowers ($r = 0.458$, $p = 0.0001$). However, when garden clubs were removed from the sample (70 percent of responding garden club memberships were mostly female), there were no significant correlations between women and the types of programs they would choose or when they would meet. Similarly, 78 percent of organizations whose memberships were primarily black were neighborhood organizations. Consequently, these results should be helpful in planning neighborhood programs, but should not be used to draw inferences for organizations whose members are primarily black.

No groups indicated their members were mostly male with the exception of 13 civic organizations. These organizations were not likely to schedule programs about sharing nature activities with children ($r = -0.29$, $p = 0.004$), identifying wildflowers ($r = -0.274$, $p = 0.006$), or identifying and growing native plants and trees ($r = -0.288$, $p = 0.004$). They also were not likely to pay for a program ($r = 0.013$, $p = 0.01$), or to request a field trip ($r = -0.323$, $p = 0.002$) or a 1-session workshop ($r = -0.364$, $p = 0.0005$). However, they were likely to plan a program about protecting groundwater ($r = 0.256$, $p = 0.014$) or caring for lawns without chemicals ($r = 0.305$, $p = 0.003$).

Groups whose members were primarily 55 and over were evenly spread among civic, garden, and neighborhood organizations. These organizations were likely to meet during the day ($r = 0.256$, $p = 0.005$), and to choose a slide presentation/talk as a program ($r = 0.288$, $p = 0.005$). There was a correlation between groups whose members were mostly over 55 and programs about caring for lawns without chemicals ($r = 0.39$, $p = 0.0001$) and controlling pests safely around the home ($r = 0.433$, $p = 0.0001$). They were not likely to plan a program about sharing wildlife activities with children ($r = 0.351$, $p = 0.0005$).

Planning Programs for Roanoke Valley Organizations

No matter how the topics were ranked, recycling received the highest number of positive responses. The popularity of recycling at the time of the survey was probably related to pressure on landfill space and pending implementation of a curb-side recycling program. Other programs that appealed universally to groups (rather than to any 1 group in particular) and that consistently fell within the top 10 choices when ranked by number of times they were starred as a program most likely to be scheduled or number of highly likely responses, were: identifying birds at the home feeder, protecting the Roanoke River, feeding wildlife

in winter, understanding air pollution, protecting endangered species, and preserving wildlife habitat.

Planners often chose topics that were directly related to members of their organizations rather than general environmental/wildlife topics. PTA's gave their highest marks to sharing wildlife activities with children. They also gave high marks to topics that are often favorites of children, such as exploring the insect world and exploring local geology. Neighborhood groups gave highest ratings to topics that can directly relate to a homeowner: recycling, safe pest control around the home, protecting groundwater, and maintaining lawns without chemicals. Three of 4 favored topics of garden clubs were related to plants.

PTA's, with high interest in programs and large memberships, provide an excellent forum for communicating information about wildlife and the environment to a large number of people. With a high interest in topics that involve sharing nature and wildlife activities with children, the potential educational effect of programs crosses generations and reaches far beyond attendance at meetings. Field trips, (probably including parents and children), should be popular based on responses (64 percent were highly likely to schedule a field trip). Concepts and activities to share with children could be introduced at a regularly scheduled PTA meeting, followed by a parent/child

field trip on a later weekend. Follow-up and additional activities could be suggested through a PTA newsletter.

A number of concepts and topics could be covered while emphasis was placed on parent/child interaction. School projects could also become a part of the activity. For example, if a family worked together to plan winter food and shelter for wildlife, observations on wildlife that are attracted to the yard could become part of a science project for the school science fair. Families could also work together to develop nature trails and wildlife viewing areas on the school grounds. Some PTA's provide programs for children while their parents are in PTA meetings. This time offers an opportunity to present programs to students on how to involve their parents in environmental activities.

Fifty-four percent of neighborhood groups indicated they were likely to have more programs about nature, wildlife, and/or the environment if they were offered free and made readily available. Well-developed programs on safely controlling pests and their damage around the home, and on caring for lawns without chemicals may appeal to neighborhood organizations as well as groups whose members are mostly senior citizens. Thirty-eight percent of neighborhood groups indicated they would schedule a program on wildlife around their homes or neighborhoods, although 54 percent were not likely to schedule a program about

wildlife. Because few topics were given high marks by neighborhood organizations, other topics not included on the survey should also be considered. For example, a program on environmental justice or environmental equity may appeal to some neighborhood organizations.

Other than recycling, the topics offered in the survey generally did not appeal to civic groups. However, 55 percent indicated they would have more programs related to nature, wildlife, and/or the environment if they were free and made readily available. The audience is there, so programs that appeal to civic organizations should be developed. In Florida, programs that answer questions on business-related environmental concerns have been popular with some civic organizations (Healey 1992). More than 400 Florida Rotary Clubs are participating in a program that helps businesses save money while implementing measures to protect the environment. A program on caring for lawns without chemicals did appeal to civic organizations in the Roanoke Valley whose members were mostly men. If a program on lawns is developed for neighborhood organizations, it may also be of interest to some civic groups. Some topics may also have more appeal with a change in title. For example, "environmentally friendly ways to save time and money on lawn care" may attract more interest than "caring for lawns without chemicals". "Saving Roanoke's declining wildlife

species" may be chosen before "preserving wildlife habitat". "Creating a backyard habitat with your child" may draw more groups than "landscaping for wildlife".

Planning programs for environmental groups per se may not be an efficient use of available resources. All programs for 4 of the 10 responding environmental groups are already related to nature, wildlife, and/or the environment, and only one group indicated they would schedule more programs than they currently have if they were made readily available at no cost. Similarly, only 2 garden clubs indicated they would have more programs about nature, wildlife, and/or the environment if made readily available.

Programs garden clubs were likely to schedule could be planned and presented by volunteers from environmental organizations. For example, programs on identification of wildflowers and native plants could be presented by members of the Blue Ridge Wildflower Society, a group that considers public education an important part of its mission. Programs on bird identification and gardening for birds could be presented by members of the Roanoke Bird Club. A speakers bureau coordinated by the park system or other organization could match groups with speakers and publicize information about available programs.

Programs about wildlife that people might see around their homes or neighborhood are likely to appeal to most

groups who are interested in having a program on wildlife. None of the types of programs offered (i.e., slide presentations, guided nature walks, etc.) appeared to have broad appeal. Slide shows received the highest number of likely responses. Slide presentations are the type of program often presented at organization meetings, probably because they allow a relatively easy presentation of information in a short time period. Other program formats may need to be pursued in addition to those offered on the survey.

Announcements about wildlife and environmental program opportunities should be placed in local newspapers. To provide reinforcement and to reach people who may miss the newspaper information, other public service announcements should be used (e.g., announcements on local radio and television stations, and in newsletters for the park system and other agencies and organizations). Several organizations mentioned that they would be glad to include information in their newsletters about programs.

Asking groups to pay a small fee to help defray the costs of a program (e.g., transportation expenses for the speaker) was not a popular idea among program planners and may limit speaking opportunities. Eventually, if a few high quality programs are developed and gain a reputation, a small fee charge may be more readily accepted.

A large number of people can be reached by providing information through organization meetings. For example, one program presented to each Roanoke organization interested in more programs than they currently have related to wildlife and/or the environment could reach about 4,000 people. This figure is based on the assumption that PTA numbers can be multiplied by a conservative factor of 2 because of the high interest in sharing activities with children. A program on sharing wildlife activities with children presented to the 20 interested PTA's could reach about 3,600 people. One program presented to each of the 34 organizations indicating high interest in protecting the Roanoke River could reach about 3,000 individuals.

Park systems can offer a wider range of topics than they currently provide by taking advantage of quality programs that are developed by other agencies. State agencies could provide materials and guidance to local instructors, much as they currently do for Project Wild within the schools. For example, biologists with the Virginia Department of Game and Inland Fisheries (VDGIF) have put together a slide presentation on endangered species in southwest Virginia that may be popular with PTA's in that part of the state. With training and direction from VDGIF staff, a quality program could be presented to a number of organizations with limited preparation and expense.

Implications for Fish and Wildlife Agencies

With declining revenues and the growing need to educate an urban public, a working relationship with local agencies could also benefit the VDGIF. Wildlife managers have the responsibility of "marketing" sound management of the wildlife resource to the public (VanMeter 1988). Through programs offered by local agencies, natural resource agencies can have direct access to a number of people they may otherwise fail to reach.

State or federal wildlife agencies can design educational programs that reach the grass roots level. Sets of materials could be designed to be used by presenters at the local level. These presenters could be professional environmental educators with local agencies, trained volunteers such as those currently teaching Project Wild workshops, or members of interest groups such as affiliates of the Virginia Society of Ornithology or the Virginia Native Plant Society. Prepared materials could include "teachers' manuals", packets of audio-visual materials, inexpensive kits of activities that can be purchased by those attending programs, etc. Local facilitators could be trained by agency employees in workshops offered around the state.

A presentation to PTA's on sharing wildlife activities

with children would likely attract the largest possible audience. The program could be family oriented, and incorporate the wildlife topics that were popular across organizations (identifying birds at the home feeder, feeding wildlife in winter, and preserving wildlife habitat). Based on average attendance at meetings and interest expressed in such a program, about 2 programs a month given to education groups in Roanoke during the school year could reach about 1,800 people. If each adult attending a program shared an activity with one child, 1,800 people becomes 3,600 people reached in one year in one city with 1 program. Any one of the survey topics that are related to fisheries (protecting the Roanoke River, protecting endangered species, studying ponds and streams, or exploring the insect world) could be presented to interested PTA's in the city and reach about 2,000 people per topic.

Roanoke County and Salem City schools' PTA's were not surveyed, but the potential number reached in the Roanoke Valley is much greater than 1,800 or 3,600 people. If the same proportion of PTA's expressed interest in programs, a valley-wide program presented to PTA's on sharing wildlife activities with children could reach about 8,000 people. About 70 percent of the education organizations in Roanoke now have less than 1 program a year related to nature, wildlife, or the environment, so a group would be reached

that may otherwise not benefit from wildlife education programs.

Universities can also broaden their programs by emphasizing the social, economic and political aspects of natural resource management (McMullin and Nielsen 1991). Results of a 1985 questionnaire mailed to institutions offering wildlife curricula indicated that only 15 percent of the reported research dealt with human dimensions, planning, education, or economic aspects (Adams, L.W. et al. 1987). The same areas were also rated as low priorities for future research.

Developing programs for adult organizations such as civic, neighborhood, and education groups potentially benefits the resource, the agency, and the public. The resource stands to benefit from a more educated public that better understands and appreciates the wildlife resource and its ecological requirements and interrelationships, and from resulting improved land stewardship practices. The agency can benefit from an educated public that may be supportive of responsible wildlife management practices and may provide constructive input in the public participation process. The agency and the resource can benefit from informed input into local land use planning, potential financial support, and support of legislation that favors the agency and the resource. Building public awareness can increase the

enjoyment people derive from the natural world, and the satisfaction that they may derive from helping wildlife and the environment in some way.

Suggestions for Future Studies

When conducting this research project, numerous methodological decisions were made. The following suggestions are based on experience gained from this study, and may be helpful for future studies of a similar nature.

Topic Selection.--Program topics on the survey were chosen by combining topics currently offered by park systems, nature centers, environmental groups, etc., with topics which were developed based on knowledge of the Roanoke Valley and personal experience. Focus groups conducted with representatives from organizations before a survey is developed may help to identify topics of potential interest that have not been traditionally offered. Participants in focus groups may also help to identify other issues that should be addressed in the survey.

Developing specific objectives for an environmental education program should also be a helpful tool in survey construction. Objectives can be translated into topics that are directly related to the groups being surveyed. For example, an objective "to develop a basic understanding of

an ecological system and the potential impact of human activities on that system" may result in the topic "protecting endangered species in the Roanoke River". Multiple topics from the present study could be combined into fewer topics with broad appeal that still cover the critical information from all of the topics.

Sample Selection.--Because of budget constraints and the desire to maintain excellent public relations, courtesy surveys were sent to organizations that did not appear appropriate for the study, and some organizations were excluded because of their distance from the urban center of the city. The universe to be studied should be clearly defined before the first mailing and should be followed throughout all follow-up mailings.

Survey Construction.--The somewhat narrow age ranges provided on the survey resulted in a high number of "mixed age group" responses. It may be helpful to use very broad ranges, combining the 18-34 and 35-54 age groups into one.

Summary and Conclusions

Natural resource agencies are faced with the challenge of educating a public that primarily interacts with and learns about wildlife in an urban or suburban environment. Agencies need to avoid conflict with and gain support from a public that has limited knowledge of animals and ecology. There is a need to reach a large population with information at the same time that agency funds and staff are low. Organization meetings provide a forum for disseminating information about wildlife and the environment to a large number of people. They also provide agencies an opportunity to meet with the public, explain their mission and programs, and potentially garner support. State agencies, such as departments of natural resources and/or fish and wildlife organizations, may be able to develop a few high quality programs and then train local park system or nature center personnel to give them to groups in their areas.

To make the best use of resources, a local agency should consider developing a few programs with high public appeal, and present them when possible to large groups. Recycling and sharing nature and wildlife activities with children appear to be some of the most effective programs for the Roanoke Parks Department to develop initially. With

large memberships, high interest in programs, and potential to influence across generations, PTA's are important organizations to target. Civic and neighborhood groups should also be pursued, while garden clubs' needs may be met through other organizations or agencies, allowing resources to be focused where they can be used most efficiently. When possible, programs should relate directly to the needs and interests of the audience, rather than to wildlife or the environment in general.

Organizations are likely to schedule more presentations about wildlife and the environment than they currently have if programs are made readily available at no cost. However, programs traditionally offered by agencies such as park systems or nature centers may attract some individual participants, but may be inappropriate for presentation to most groups. To offer programs that appeal to a broad segment of the population beyond park visitors, new topics need to be offered. Topics that appeal to members of the business community have not been offered in the past and are important to develop. Information from programs traditionally offered can be incorporated into new programs.

Offering programs on wildlife that the public is not likely to encounter, or charging for programs, or planning presentations for groups whose programs are already related to wildlife and/or the environment may be an inefficient use

of wildlife agency staff and resources. Wildlife programs will have the broadest appeal if they involve wildlife that people are likely to see around their homes or neighborhoods. With the publics' growing interest in observing wildlife, targeting adult organizations provides a realistic avenue for agencies to reach a large number of people with minimal costs.

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Appendix A. Survey Tools

Appendix A.1 Survey

PLANNING ENVIRONMENTAL EDUCATION PROGRAMS:

A SURVEY OF ROANOKE VALLEY ORGANIZATIONS

ROANOKE CITY

PARKS & RECREATION

Your response to this survey will help us plan programs for your organization that meet the needs and interests of your members about nature, wildlife, and the environment. Feel free to comment on any questions using the margins and the space provided at the end of the survey. If you are not the person who plans programs for your organization, please give the survey to the person who does plan programs, and include their name and address on the enclosed return postcard.

Thank you for your help.

Please return this survey in the stamped envelope provided to:

Tom Clarke, Recreation Programmer
City of Roanoke
Department of Parks and Recreation
210 Reserve Avenue, S.W.
Roanoke, Virginia 24016

Instructions: Please answer the questions as though you are planning programs for your organization for the next two years.

Part 1

We have some questions about the likelihood that you would schedule programs on nature and the environment.

A. If programs on the topics listed below are made available, please indicate the likelihood that you would schedule a talk about each topic.

HIGHLY LIKELY means you are likely to schedule such a program.
SOMEWHAT LIKELY means you might schedule such a program.
NOT LIKELY means you probably would not schedule such a program.
NOT SURE means you do not know if you would schedule such a program.

(Circle your answer)

1. Identifying and/or growing wildflowers.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

2. Identifying and/or growing native plants and trees.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

3. Identifying and using wild edible plants.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

4. Stargazing (evening star watching).....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

5. Sharing nature activities with children.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

6. Photographing nature.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

7. Recycling.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

8. Protecting groundwater.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

9. Caring for lawns without chemicals.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

10.Organic gardening.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

11.Controlling pests safely around the home.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

12.Identifying rocks and minerals.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

13.Exploring local geology.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

14.Hunting for fossils.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

15.Studying ponds and streams.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

16.Protecting the Roanoke River.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

17.Exploring the insect world.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

18.Understanding air pollution.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

19.Preserving open space.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

20.Composting organic waste.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

B. Now please go back through the topics listed above (numbers 1-20) and put an * to the left of the three topics you would be most likely to schedule for your organization.

Part 2

A. Now we have some questions about your likelihood to schedule programs about wildlife. For the purposes of this survey, consider wildlife as any wild bird, fish, mammal, reptile, amphibian, or butterfly. Do not include as wildlife: pets, stray animals, or plants.

(Circle your answer)

1. Birdwatching..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

2. Identifying wildlife other than birds..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

3. Identifying birds at the home feeder..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

4. Protecting wildlife from harm (from cats, pesticides, plate glass windows, etc.)..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

5. Improving wildlife habitat on private property..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

6. Landscaping for wildlife..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

7. Using native plants to provide food and cover for wildlife..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

8. Sharing wildlife activities with children..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

9. Photographing wildlife..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

10. Protecting endangered species..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

11. Woodworking for wildlife (building nesting boxes, feeders, etc.)..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

12. Managing ponds for wildlife..... HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

13. Feeding wildlife in winter.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

14. Controlling wildlife pests and/or damage.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

15. Preserving wildlife habitat.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

B. Now please go back through the topics concerning wildlife listed above (numbers 1-15) and put an * to the left of the three topics you are most likely to schedule for your organization.

C. Please list other topics about wildlife, nature, or the environment (in addition to those already listed) that you would be highly likely to schedule for a program.

_____

_____

D. About what type of wildlife would you be likely to schedule a program?

(Circle the number of ALL answers that apply)

I WOULD BE LIKELY TO SCHEDULE A PROGRAM ABOUT:

1. WILDLIFE THAT MEMBERS MIGHT SEE AROUND THEIR HOMES OR NEIGHBORHOODS
2. ENDANGERED SPECIES
3. WILDLIFE FOUND IN PARKS AND REFUGES
4. WILDLIFE PESTS AND HOW TO DEAL WITH THEM
5. I AM NOT LIKELY TO SCHEDULE A PROGRAM ABOUT WILDLIFE

Part 3

Your response to this section will help the Roanoke City Department of Parks and Recreation plan the types of programs that will meet the interests and needs of your organization concerning nature, wildlife, and the environment.

A. If the following types of programs concerning wildlife, nature, and/or the environment are made available for your organization, please indicate the likelihood that you would schedule each type of program.

PLEASE REMEMBER THAT THE PROGRAMS WOULD CONCERN NATURE, THE ENVIRONMENT, AND/OR WILDLIFE.

(Circle your answer)

1.A guided nature walk (include here both general walks and walks with a specific focus, such as bird watching).....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

2.A slide presentation/talk.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

3.A field trip to a nature center, wildlife sanctuary, natural history museum, environmental education center, demonstration area (such as a model backyard habitat), etc....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

4.A one-session workshop.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

5.A movie or video.....HIGHLY LIKELY SOMEWHAT LIKELY NOT LIKELY NOT SURE

B. Where would you most likely read or hear about environmental education and/or wildlife education programs that are offered to the public, including ones that are offered to organizations?

(Please circle the numbers in front of ALL of the places where you would likely hear about programs offered.)

1. LOCAL NEWSPAPER
2. LOCAL RADIO STATION
3. ANNOUNCEMENTS ON LOCAL TELEVISION
4. BROCHURE LISTING ADULT EDUCATION COURSES
5. PARK SYSTEM NEWSLETTER

C. How much time does your organization allow for the program section of each meeting?
(Circle the number in front of your answer)

1. LESS THAN 20 MINUTES
2. 20 MINUTES
3. 30 MINUTES
4. 45 MINUTES
5. MORE THAN 45 MINUTES

D. Would a question and answer session be included in the time allowed for the program (as indicated above)?

1. YES
2. NO

E. If a question and answer session is not included in the time allotted for the program, would additional time be allowed for a question and answer session?

1. YES
2. NO

F. Would your organization be willing to pay a minimal fee for a presentation?

1. YES
2. NO
3. UNSURE

G. If your organization is willing to pay a minimal fee for a presentation to help cover expenses, how much would they be willing to pay for a one hour slide presentation about the environment? (The amounts suggested below would be the total amount for the organization, not a charge per individual.)

1. LESS THAN $5
2. $5 - $9
3. $10 - $14
4. $15 - $19
5. $20 - $25
6. NOT SURE
7. OUR ORGANIZATION WOULD PROBABLY NOT BE WILLING TO PAY A FEE FOR A ONE HOUR SLIDE PRESENTATION.

H. What services do you feel the Roanoke City Department of Parks and Recreation could provide, other than those suggested on this questionnaire, to help improve the quality of our local environment and increase your enjoyment of nature and wildlife?

_____

_____

_____

_____

Part 4

These last questions will help us determine if we have adequately sampled organizations in the Roanoke area. It will also help us plan programs for organizations that may be similar to your own.

A. How many people are currently members of your organization? _____

B. Approximately how many people attend your regularly scheduled meetings? _____

C. How often does your organization meet as an entire group?

1. ONCE A WEEK
2. ONCE A MONTH
3. TWICE A MONTH
4. EVERY OTHER MONTH
5. OTHER (please specify)_____

D. Which of the following best describes your organization?
(Several choices may apply to your group. Please circle the number in front of the one answer that best describes your club or organization)

1. A CIVIC CLUB (e.g. Kiwanis, Junior Woman's Club)
2. A SENIOR CITIZEN'S ORGANIZATION
3. A GARDEN CLUB
4. AN ENVIRONMENTAL ORGANIZATION (e.g. Sierra Club)
5. A NEIGHBORHOOD OR COMMUNITY ORGANIZATION
6. A HOBBY OR SPORTS CLUB
7. AN EDUCATION ORGANIZATION (e.g. PTA)

E. Which of the following best describes the members of your organization?

(Circle the number in front of your answer)

1. MOST OR ALL MEMBERS ARE MALE
2. MOST OR ALL MEMBERS ARE FEMALE
3. MEMBERS INCLUDE BOTH MALES AND FEMALES

F. Which of the following age-ranges is the most predominant in your organization?

1. AGES 18 - 34
2. AGES 35 - 54
3. AGES 55 AND OVER
4. NO AGE RANGE PREDOMINATES

G. Which of the following statements best describe the members of your organization?
(Please circle all of the answers that apply)

1. MEMBERSHIP IS ETHNICALLY MIXED
2. MOST OR ALL ARE BLACK
3. MOST OR ALL ARE WHITE
4. OTHER (please specify)_____

H. When does your organization usually hold meetings?

1. WEEKDAY EVENINGS
2. WEEKDAYS DURING THE DAYTIME
3. WEEKEND EVENINGS
4. WEEKENDS DURING THE DAYTIME

I. How often are the programs currently presented at your meetings specifically related to nature, wildlife, and/or the environment?

1. LESS THAN ONCE A YEAR
2. ONCE OR TWICE A YEAR
3. THREE TO FIVE TIMES A YEAR
4. SIX TO EIGHT TIMES A YEAR
5. NINE OR MORE TIMES A YEAR
6. EVERY PROGRAM IS RELATED TO NATURE, WILDLIFE, AND/OR THE ENVIRONMENT

J. About how many programs does your organization have each year?

1. 1-5
2. 6 (ABOUT ONE PROGRAM EVERY OTHER MONTH)
3. 8-9 (MONTHLY PROGRAMS EXCLUDING SUMMER AND/OR HOLIDAY MONTHS)
4. 12 (ABOUT ONE PROGRAM A MONTH)
5. 24 (ABOUT TWO PROGRAMS A MONTH)
6. 50 (ABOUT ONE PROGRAM A WEEK)

K. If programs were made readily available at no cost, about how many of your programs each year would relate specifically to nature, wildlife, and/or the environment?

1. NONE
2. 1 TO 2
3. 3 TO 5
4. 6 TO 8
5. 9 OR MORE

It may be helpful to contact you by phone or mail to clarify answers. If this is agreeable with you, please complete the following information:

NAME:_____

ADDRESS:_____

PHONE:_____

BEST TIME TO CONTACT YOU:_____

NAME OF YOUR ORGANIZATION: _____

Please use the space below and on the next page for additional comments you may wish to make concerning programs offered by the Roanoke City Department of Parks and Recreation, or about nature, wildlife, and/or the environment in the Roanoke area.

Your participation in this study is greatly appreciated. If you would like to be included on a mailing list of activities sponsored by the Roanoke City Department of Parks and Recreation, please fill in your name and address in the space provided above and place a check-mark here:_____. If you would like to be on the mailing list, but prefer not to include your name and address on this survey, please call the Park office at 981-2236, or write to the Roanoke City Department of Parks and Recreation at 210 Reserve Avenue, S.W., Roanoke, Virginia 24016. If you would like a summary of the results of this survey, place a check-mark here:____, or call the Park office.

Appendix A.2 Letter to Presidents

ROANOKE CITY
PARKS & RECREATION
210 Reserve Avenue SW Roanoke, Virginia 24016 703/981-2236 FAX 703/981-1287

October 28, 1991

Mr. John President
Your Organization
1000 Main Street
Roanoke, VA 24008

Dear Mr. President,

This Department is designing programs to promote awareness, enjoyment and protection of our natural world. A variety of programs are already in progress, including Youth Discovery Camps, Eco-series, and Outdoor Outreach, a program co-sponsored with the Science Museum of Western Virginia. The Department hopes to eventually establish an environmental education center with staff and facilities to provide a wide variety of programs for Valley residents of all ages.

We also wish to build an outreach program in which staff, along with volunteers, provide programs for local organizations. In conjunction with a Virginia Tech graduate student, we are conducting a survey of civic clubs, environmental groups, and senior citizen organizations. The survey will help us plan programs that meet the needs and interests of Valley organizations concerning nature, wildlife and the environment.

The survey will be mailed to the person responsible for planning programs, and will take about ten minutes to complete. An addressed, stamped envelope will be included for return. Survey questions will cover program topics that may be of interest to your group, and how these programs may best be presented.

In order that the survey reach the proper person, please complete and return the enclosed post card by November 4. The needs and interests of your organization are important to us, and we look forward to providing programs that meet those needs.

If you have questions, call Tom Clarke at the number above, Dr. Patrick Scanlon in the Department of Fisheries and Wildlife at VA Tech: 703-231-4586, or Suzie Leslie in the evenings at 703-951-3100. Your assistance is appreciated.

Sincerely,

Tom Clarke Suzie Leslie

Appendix A.3 Postcard in Letter to Presidents

Name of Organization: _____

Name of Person who Plans Programs: _____

Address of Person who Plans Programs: _____

_____

Telephone Number of Person who Plans Programs (Optional) _____

Appendix A.4 Cover Letter with Survey

ROANOKE CITY
PARKS & RECREATION
210 Reserve Avenue SW Roanoke, Virginia 24016 703/981-2236 FAX 703/981-1287

January 29, 1992

Ms. Jane Program Chair
2000 Main Street
Roanoke, VA 24014

Dear Ms. Chair,

This Department is designing programs to promote awareness, enjoyment and protection of our natural world. A variety of programs are already in progress, including Youth Discovery Camps, Eco-series, and Outdoor Outreach, a program co-sponsored with the Science Museum of Western Virginia. The Department hopes to establish, at some point in the future, an environmental education center with staff and facilities to provide a wide variety of programs for Valley residents of all ages.

We also wish to build a program in which staff, along with volunteers, provide programs for local organizations. In conjunction with Virginia Tech, we are conducting a survey of the program chairs of civic clubs, educational and environmental groups, and senior citizen organizations. Your response to this survey will help us plan programs that meet the needs and interests of the members of "Hillside Garden Club" about nature, wildlife, and the environment.

We are asking the primary program planner for each organization to take about ten minutes to complete the enclosed survey. An addressed, stamped envelope is included. If you are not the person who plans programs for "Hillside Garden Club", please give the survey to the person who does plan programs. Whether or not you are the program chair, please complete and return the enclosed stamped postcard so that we will know the person to contact for programs.

The needs and interests of "Hillside Garden Club" are important to us, and we look forward to providing programs that meet those needs. If you have questions, please call Tom Clarke at the number above, Dr. Patrick Scanlon in the Department of Fisheries and Wildlife at VA Tech: 703-231-4586, or Suzie Leslie in the evenings at 703-951-3100. Your assistance is appreciated.

Sincerely,

Tom Clarke Suzie Leslie

Appendix A.5 Postcard Included with Survey

Name of Organization: _____

Program Chair: _____

Address of Program Chair: _____

_____

Telephone Number of Program Chair: _____

_____ Please check here if you are not the program chair, but are passing the survey to the above person who does plan programs.

Appendix A.6 Reminder/Thank You Postcard

January 16, 1992

Last week the Roanoke Parks Department mailed a questionnaire to you about planning environmental education programs for your organization. Your response will help us design programs that meet the needs and interests of your members.

If you have already completed and returned the questionnaire, please accept our sincere thanks. If not, please do so today. It is extremely important that we develop educational programs that will be of interest to your group.

If by some chance you did not receive the questionnaire, please call me (981-2236) and I will get another one in the mail to you today.

Sincerely,

Tom Clarke, Recreation Programmer

Appendix A.7 Cover Letter for Follow-up Survey

ROANOKE CITY
PARKS & RECREATION
210 Reserve Avenue SW Roanoke, Virginia 24016 703/981-2236 FAX 703/981-1287

March 28, 1992

Mr. John P. Chair
400 Main Street
Roanoke, VA 24014

Dear Mr. Chair,

About eight weeks ago we wrote to you asking your help in designing environmental education programs geared to the interests of members of Roanoke area organizations. As of today we have not received a response from "Hillside Breakfast Club".

We are writing to you again because of the significance your response has to the usefulness of this study. With your help, the Roanoke Parks Department can develop quality programs specifically related to the environment of the Roanoke Valley and to the interests of your members. These programs will then be made readily available to "Hillside Breakfast Club" for meetings in the future.

If you are not the program chair for "Hillside Breakfast Club", but are involved with program development, your response will still be very useful. Please do not be concerned if your term as officer or committee chair is about to expire. You have knowledge of the types of programs "Hillside Breakfast Club" is likely to plan, and consequently your response will be extremely helpful. Even if programs for "Hillside Breakfast Club" have been planned for the next year, your opinions will enable us to provide programs for your organization in the future.

If "Hillside Breakfast Club" is not likely to have programs related to the environment at any time, please return the questionnaire and indicate that information. In the event that your questionnaire has been misplaced, a replacement and a stamped, addressed envelope are enclosed. If you have questions, please call Tom Clarke at the number above.

Your assistance is greatly appreciated.

Sincerely,

Tom Clarke Suzie Leslie

Appendix B. Organizations Included in Study

Civic Clubs
Civitan Club of Roanoke
Botetourt Jaycees
Cave Spring Jaycees
Roanoke Jaycees
Salem Jaycees
Kiwanis Club of Roanoke Valley
Kiwanis Club of Roanoke
Salem Kiwanis Club
Cave Spring District Lions Club
Crossroads Lions Club
Edgewood Lions Club
Fort Lewis Lions Club
Hollins Lions Club
The Mt. Pleasant Lioness Club
Mount Pleasant Lions Club
Northside Lions Club
Raleigh Court Lions Club
Roanoke Airport Breakfast Lions Club
Roanoke Host Lions Club
Roanoke Valley Breakfast Lions Club
Tanglewood Breakfast Lions Club
Troutville Lions Club
Villa Heights Lions Club
Vinton Breakfast Lions Club
Vinton Host Lions Club
Williamson Road Lions Club
Cosmopolitan Club
Optimist Club of Roanoke
North Roanoke Rotary Club
Rotary Club of Roanoke
Rotary Club of Salem
Brambleton Junior Woman's Club
Christian Women's Club
Junior League of Roanoke Valley
Junior Woman's Club of Vinton
Roanoke County Woman's Club
Roanoke Valley Junior Woman's Club
Rokeva Woman's Club
Salem Junior Woman's Club
Salem Woman's Club
Totera Woman's Club
Williamson Road Woman's Club
Woman's Club of Roanoke
Glenvar Extension Homemakers
Oak Grove Extension Homemakers

Woodlawn Extension Homemakers Club
Athenian Society for the Arts & Sciences
Valley Beautiful

Neighborhood Organizations
Altruist Club
Bent Mountain Civic League
Bridlewood Property Owners Association
Carriage Hills Homeowners Association
Cherokee Hills Community Association
Clearbrook Civic League
Cove Road Action League
Fairland Lake Civic Organization
Gainsboro Neighborhood Development Comm.
Garden City Civic League
Georgetown Park Civic Association
Grayson Avenue Beautification Council
Greater Deyerle Neighborhood Association
Greater Raleigh Court Civic League
Green Valley Civic Association Inc.
Hurt Park Neighborhood Alliance
Loudon-Melrose Neighborhood Organization
Melrose-Rugby Neighborhood Forum
Mount Pleasant Civic League
Mountain View Neighborhood Alliance
Neighbors in South Roanoke
Northwest Neighborhood Environ. Organ.
Northwest Neigh. Improvement Council
Old Mill Forest Property Owners Assoc.
Old Southwest, Inc.
Peters Creek Civic League
Pine Hill Homeowners Association
Riverland Alert Neighbors
Roanoke Valley Preservation Foundation
Southeast Action Forum
The Orchards Civic Association
Thirlane Road Neighborhood Association
Upper Loudon Avenue Crime Watch and Development Committee
Villa Heights Crime Prevention Group
Wasena Neighborhood Forum
Wildwood Civic League
Williamson Road Action Forum
Woodbridge Neighborhood Association

Senior Citizen Organizations
American Association of Retired Persons
American Association of Retired Persons S.W. Roanoke Valley
American Association of Retired Persons Chapter 514
Forty-Niners Plus Club

Environmental/Hobby Organizations
Blue Ridge Beekeepers
Blue Ridge Bicycle Club
Blue Ridge Grotto
Blue Ridge Wildflower Society
Citizens Environmental Council
Coalition for a Clean River
Friends of the Blue Ridge Parkway
Friends of the Roanoke River
Roanoke Appalachian Trail Club
Roanoke Camera Club
Roanoke Valley Astronomical Society
Roanoke Valley Bird Club
Roanoke Valley Mineral & Gem Society
Sierra Club

Garden/Plant Clubs
Blue Ridge Chrysanthemum Society
Blue Ridge Iris Society
Blue Ridge Orchid Society of Virginia
Dig and Dream Garden Club
Dogwood Garden Club
Happy Gardeners Garden Club
Herb Society of Southwestern Virginia
Hillandale Garden Club
Hinoki Bonsai Club
Hunting Hills Garden Club
Jefferson Hills Garden Club
LaBellevue Garden Club
Lake Spring Garden Club
Magic City Garden Club
Mill Mountain Garden Club
North Lakes Garden Club
Oakland Garden Club
Roanoke Council of Garden Clubs
Roanoke Rose Society
Roanoke Valley Garden Club
Rosaling Hills Garden Club
Round Hill Garden Club
South Hills Garden Club
Sugar Loaf Garden Club
Town & Country Garden Club
Valleevue Garden Club
Wasena Garden Club
Westchester Garden Club

Education/PTA Organizations

American Assoc. of University Women
Archeological Society of Virginia
Roanoke County Council of PTAs
Smith Mountain Lake 4-H Center
Addison PTA
Breckenridge PTA
Crystal Spring PTA
Fairview PTA
Fallon Park PTA
Fishburn Park PTA
Fleming PTA
Forest Park PTA
Garden City PTA
Grandin Court PTA
Patrick Henry PTA
Highland Park PTA
Huff Lane PTA
Lincoln Terrace PTA
Madison PTA
Monterey PTA
Morningside PTA
Roanoke Academy PTA
Oakland PTA
Preston Park PTA
Raleigh Court PTA
Round Hill PTA
Ruffner PTA
Virginia Heights PTA
Wasena PTA
Westside PTA
Woodrow Wilson PTA

Appendix C. Summary of Survey Responses by Organization

Notes on Appendix C

The following variables correspond to specific survey questions (see Appendix A.1).

Variable	Corresponding survey question
A1 - A20	Part 1. A. Questions 1 - 20
B1 - B15	Part 2. A. Questions 1 - 15
B81 - B85	Part 2. D. Questions 1 - 5
C1 - C5	Part 3. A. Questions 1 - 5
C6 - C10	Part 3. B. Questions 1 - 5
C11 - C15	Part 3. C., D., E., F., G.
Freq	Part 4. C.
Org	Part 4. D.
Sex	Part 4. E.
Age	Part 4. F.
Race	Part 4. G.
Meet	Part 4. H.
Often	Part 4. I.
Prog	Part 4. J.
Num	Part 4. K.

The one organization whose survey was returned without identification or indication of organization type is represented as "unknown".

Total number of organizations included in Appendix C. (i.e., 115) excludes 2 senior citizen organizations and 4 organizations that were no longer functioning.

Summary of Survey Data by Organization Type

TABLE OF A1 BY ORG

A1(IDENTIFYING/GROWING WILDFLOWERS) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	3	0	8	1	17
	0.87	3.48	2.61	0.00	6.96	0.87	14.78
	5.88	23.53	17.65	0.00	47.06	5.88	
	100.00	12.90	14.29	0.00	30.77	3.85	
HIGHLY LIKELY	0	1	13	0	1	4	19
	0.00	0.87	11.30	0.00	0.87	3.48	16.52
	0.00	5.26	68.42	0.00	5.26	21.05	
	0.00	3.23	61.90	0.00	3.85	15.38	
SOMEWHAT LIKELY	0	6	2	3	5	12	28
	0.00	5.22	1.74	2.61	4.35	10.43	24.35
	0.00	21.43	7.14	10.71	17.86	42.86	
	0.00	19.35	9.52	30.00	19.23	46.15	
NOT LIKELY	0	20	3	7	12	9	51
	0.00	17.39	2.61	6.09	10.43	7.83	44.35
	0.00	39.22	5.88	13.73	23.53	17.65	
	0.00	64.52	14.29	70.00	46.15	34.62	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A2 BY ORG

A2(IDENTIFYING/GROWING NATIVE PLANTS/TREES) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	2	0	8	3	18
	0.87	3.48	1.74	0.00	6.96	2.61	15.65
	5.56	22.22	11.11	0.00	44.44	16.67	
	100.00	12.90	9.52	0.00	30.77	11.54	
HIGHLY LIKELY	0	2	10	0	2	6	20
	0.00	1.74	8.70	0.00	1.74	5.22	17.39
	0.00	10.00	50.00	0.00	10.00	30.00	
	0.00	6.45	47.62	0.00	7.69	23.08	
SOMEWHAT LIKELY	0	4	4	3	6	12	29
	0.00	3.48	3.48	2.61	5.22	10.43	25.22
	0.00	13.79	13.79	10.34	20.69	41.38	
	0.00	12.90	19.05	30.00	23.08	46.15	
NOT LIKELY	0	21	5	7	10	5	48
	0.00	18.26	4.35	6.09	8.70	4.35	41.74
	0.00	43.75	10.42	14.58	20.83	10.42	
	0.00	67.74	23.81	70.00	38.46	19.23	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A3 BY ORG

A3(IDENTIFYING/USING WILD EDIBLE PLANTS) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	6	4	0	7	2	20
	0.87	5.22	3.48	0.00	6.09	1.74	17.39
	5.00	30.00	20.00	0.00	35.00	10.00	
	100.00	19.35	19.05	0.00	26.92	7.69	
HIGHLY LIKELY	0	0	1	0	0	4	5
	0.00	0.00	0.87	0.00	0.00	3.48	4.35
	0.00	0.00	20.00	0.00	0.00	80.00	
	0.00	0.00	4.76	0.00	0.00	15.38	
SOMEWHAT LIKELY	0	2	8	2	7	5	24
	0.00	1.74	6.96	1.74	6.09	4.35	20.87
	0.00	8.33	33.33	8.33	29.17	20.83	
	0.00	6.45	38.10	20.00	26.92	19.23	
NOT LIKELY	0	23	8	8	12	15	66
	0.00	20.00	6.96	6.96	10.43	13.04	57.39
	0.00	34.85	12.12	12.12	18.18	22.73	
	0.00	74.19	38.10	80.00	46.15	57.69	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A4 BY ORG

A4(STARGAZING) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	7	2	1	9	3	23
	0.87	6.09	1.74	0.87	7.83	2.61	20.00
	4.35	30.43	8.70	4.35	39.13	13.04	
	100.00	22.58	9.52	10.00	34.62	11.54	
HIGHLY LIKELY	0	0	0	1	0	6	7
	0.00	0.00	0.00	0.87	0.00	5.22	6.09
	0.00	0.00	0.00	14.29	0.00	85.71	
	0.00	0.00	0.00	10.00	0.00	23.08	
SOMEWHAT LIKELY	0	7	1	0	4	11	23
	0.00	6.09	0.87	0.00	3.48	9.57	20.00
	0.00	30.43	4.35	0.00	17.39	47.83	
	0.00	22.58	4.76	0.00	15.38	42.31	
NOT LIKELY	0	17	18	8	13	6	62
	0.00	14.78	15.65	6.96	11.30	5.22	53.91
	0.00	27.42	29.03	12.90	20.97	9.68	
	0.00	54.84	85.71	80.00	50.00	23.08	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A5 BY ORG

A5(SHARING NATURE ACTIVITIES WITH CHILDREN) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	5	2	0	8	2	18
	0.87	4.35	1.74	0.00	6.96	1.74	15.65
	5.56	27.78	11.11	0.00	44.44	11.11	
	100.00	16.13	9.52	0.00	30.77	7.69	
HIGHLY LIKELY	0	1	0	1	0	15	17
	0.00	0.87	0.00	0.87	0.00	13.04	14.78
	0.00	5.88	0.00	5.88	0.00	88.24	
	0.00	3.23	0.00	10.00	0.00	57.69	
SOMEWHAT LIKELY	0	8	5	4	10	6	33
	0.00	6.96	4.35	3.48	8.70	5.22	28.70
	0.00	24.24	15.15	12.12	30.30	18.18	
	0.00	25.81	23.81	40.00	38.46	23.08	
NOT LIKELY	0	17	14	5	8	3	47
	0.00	14.78	12.17	4.35	6.96	2.61	40.87
	0.00	36.17	29.79	10.64	17.02	6.38	
	0.00	54.84	66.67	50.00	30.77	11.54	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A6 BY ORG

A6(PHOTOGRAPHING NATURE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	7	2	0	9	5	24
	0.87	6.09	1.74	0.00	7.83	4.35	20.87
	4.17	29.17	8.33	0.00	37.50	20.83	
	100.00	22.58	9.52	0.00	34.62	19.23	
HIGHLY LIKELY	0	0	0	1	0	0	1
	0.00	0.00	0.00	0.87	0.00	0.00	0.87
	0.00	0.00	0.00	100.00	0.00	0.00	
	0.00	0.00	0.00	10.00	0.00	0.00	
SOMEWHAT LIKELY	0	6	5	1	8	12	32
	0.00	5.22	4.35	0.87	6.96	10.43	27.83
	0.00	18.75	15.63	3.12	25.00	37.50	
	0.00	19.35	23.81	10.00	30.77	46.15	
NOT LIKELY	0	18	14	8	9	9	58
	0.00	15.65	12.17	6.96	7.83	7.83	50.43
	0.00	31.03	24.14	13.79	15.52	15.52	
	0.00	58.06	66.67	80.00	34.62	34.62	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A7 BY ORG

A7(RECYCLING) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	2	3	1	7	2	16
	0.87	1.74	2.61	0.87	6.09	1.74	13.91
	6.25	12.50	18.75	6.25	43.75	12.50	
	100.00	6.45	14.29	10.00	26.92	7.69	
HIGHLY LIKELY	0	18	7	2	9	16	52
	0.00	15.65	6.09	1.74	7.83	13.91	45.22
	0.00	34.62	13.46	3.85	17.31	30.77	
	0.00	58.06	33.33	20.00	34.62	61.54	
SOMEWHAT LIKELY	0	9	7	2	9	5	32
	0.00	7.83	6.09	1.74	7.83	4.35	27.83
	0.00	28.12	21.87	6.25	28.12	15.63	
	0.00	29.03	33.33	20.00	34.62	19.23	
NOT LIKELY	0	2	4	5	1	3	15
	0.00	1.74	3.48	4.35	0.87	2.61	13.04
	0.00	13.33	26.67	33.33	6.67	20.00	
	0.00	6.45	19.05	50.00	3.85	11.54	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A8 BY ORG

A8(PROTECTING GROUNDWATER) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	6	7	0	6	3	23
	0.87	5.22	6.09	0.00	5.22	2.61	20.00
	4.35	26.09	30.43	0.00	26.09	13.04	
	100.00	19.35	33.33	0.00	23.08	11.54	
HIGHLY LIKELY	0	8	2	3	8	7	28
	0.00	6.96	1.74	2.61	6.96	6.09	24.35
	0.00	28.57	7.14	10.71	28.57	25.00	
	0.00	25.81	9.52	30.00	30.77	26.92	
SOMEWHAT LIKELY	0	11	5	2	8	9	35
	0.00	9.57	4.35	1.74	6.96	7.83	30.43
	0.00	31.43	14.29	5.71	22.86	25.71	
	0.00	35.48	23.81	20.00	30.77	34.62	
NOT LIKELY	0	6	7	5	4	7	29
	0.00	5.22	6.09	4.35	3.48	6.09	25.22
	0.00	20.69	24.14	17.24	13.79	24.14	
	0.00	19.35	33.33	50.00	15.38	26.92	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A9 BY ORG

A9(CARING FOR LAWNS W/OUT CHEMICALS) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	7	3	0	7	5	23
	0.87	6.09	2.61	0.00	6.09	4.35	20.00
	4.35	30.43	13.04	0.00	30.43	21.74	
	100.00	22.58	14.29	0.00	26.92	19.23	
HIGHLY LIKELY	0	6	6	1	8	2	23
	0.00	5.22	5.22	0.87	6.96	1.74	20.00
	0.00	26.09	26.09	4.35	34.78	8.70	
	0.00	19.35	28.57	10.00	30.77	7.69	
SOMEWHAT LIKELY	0	10	7	1	9	6	33
	0.00	8.70	6.09	0.87	7.83	5.22	28.70
	0.00	30.30	21.21	3.03	27.27	18.18	
	0.00	32.26	33.33	10.00	34.62	23.08	
NOT LIKELY	0	8	5	8	2	13	36
	0.00	6.96	4.35	6.96	1.74	11.30	31.30
	0.00	22.22	13.89	22.22	5.56	36.11	
	0.00	25.81	23.81	80.00	7.69	50.00	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A10 BY ORG

A10(ORGANIC GARDENING) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	6	2	0	8	2	19
	0.87	5.22	1.74	0.00	6.96	1.74	16.52
	5.26	31.58	10.53	0.00	42.11	10.53	
	100.00	19.35	9.52	0.00	30.77	7.69	
HIGHLY LIKELY	0	1	4	1	6	4	16
	0.00	0.87	3.48	0.87	5.22	3.48	13.91
	0.00	6.25	25.00	6.25	37.50	25.00	
	0.00	3.23	19.05	10.00	23.08	15.38	
SOMEWHAT LIKELY	0	10	9	2	5	8	34
	0.00	8.70	7.83	1.74	4.35	6.96	29.57
	0.00	29.41	26.47	5.88	14.71	23.53	
	0.00	32.26	42.86	20.00	19.23	30.77	
NOT LIKELY	0	14	6	7	7	12	46
	0.00	12.17	5.22	6.09	6.09	10.43	40.00
	0.00	30.43	13.04	15.22	15.22	26.09	
	0.00	45.16	28.57	70.00	26.92	46.15	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A11 BY ORG

A11(CONTROLLING PESTS SAFELY AROUND HOME) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 5.88 100.00	5 4.35 29.41 16.13	2 1.74 11.76 9.52	0 0.00 0.00 0.00	5 4.35 29.41 19.23	4 3.48 23.53 15.38	17 14.78
HIGHLY LIKELY	0 0.00 0.00 0.00	3 2.61 15.79 9.68	3 2.61 15.79 14.29	1 0.87 5.26 10.00	10 8.70 52.63 38.46	2 1.74 10.53 7.69	19 16.52
SOMEWHAT LIKELY	0 0.00 0.00 0.00	11 9.57 31.43 35.48	11 9.57 31.43 52.38	1 0.87 2.86 10.00	6 5.22 17.14 23.08	6 5.22 17.14 23.08	35 30.43
NOT LIKELY	0 0.00 0.00 0.00	12 10.43 27.27 38.71	5 4.35 11.36 23.81	8 6.96 18.18 80.00	5 4.35 11.36 19.23	14 12.17 31.82 53.85	44 38.26
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF A12 BY ORG

A12(IDENTIFYING ROCKS AND MINERALS) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 6.67 100.00	3 2.61 20.00 9.68	3 2.61 20.00 14.29	0 0.00 0.00 0.00	7 6.09 46.67 26.92	1 0.87 6.67 3.85	15 13.04
HIGHLY LIKELY	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.87 10.00 4.76	1 0.87 10.00 10.00	0 0.00 0.00 0.00	8 6.96 80.00 30.77	10 8.70
SOMEWHAT LIKELY	0 0.00 0.00 0.00	2 1.74 10.53 6.45	1 0.87 5.26 4.76	1 0.87 5.26 10.00	4 3.48 21.05 15.38	11 9.57 57.89 42.31	19 16.52
NOT LIKELY	0 0.00 0.00 0.00	26 22.61 36.62 83.87	16 13.91 22.54 76.19	8 6.96 11.27 80.00	15 13.04 21.13 57.69	6 5.22 8.45 23.08	71 61.74
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF A13 BY ORG

A13(EXPLORING LOCAL GEOLOGY) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	5	3	0	7	1	17
	0.87	4.35	2.61	0.00	6.09	0.87	14.78
	5.88	29.41	17.65	0.00	41.18	5.88	
	100.00	16.13	14.29	0.00	26.92	3.85	
HIGHLY LIKELY	0	1	0	1	1	10	13
	0.00	0.87	0.00	0.87	0.87	8.70	11.30
	0.00	7.69	0.00	7.69	7.69	76.92	
	0.00	3.23	0.00	10.00	3.85	38.46	
SOMEWHAT LIKELY	0	7	3	2	3	10	25
	0.00	6.09	2.61	1.74	2.61	8.70	21.74
	0.00	28.00	12.00	8.00	12.00	40.00	
	0.00	22.58	14.29	20.00	11.54	38.46	
NOT LIKELY	0	18	15	7	15	5	60
	0.00	15.65	13.04	6.09	13.04	4.35	52.17
	0.00	30.00	25.00	11.67	25.00	8.33	
	0.00	58.06	71.43	70.00	57.69	19.23	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A14 BY ORG

A14(HUNTING FOR FOSSILS) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	5	2	0	8	3	19
	0.87	4.35	1.74	0.00	6.96	2.61	16.52
	5.26	26.32	10.53	0.00	42.11	15.79	
	100.00	16.13	9.52	0.00	30.77	11.54	
HIGHLY LIKELY	0	0	0	1	0	7	8
	0.00	0.00	0.00	0.87	0.00	6.09	6.96
	0.00	0.00	0.00	12.50	0.00	87.50	
	0.00	0.00	0.00	10.00	0.00	26.92	
SOMEWHAT LIKELY	0	1	1	1	3	10	16
	0.00	0.87	0.87	0.87	2.61	8.70	13.91
	0.00	6.25	6.25	6.25	18.75	62.50	
	0.00	3.23	4.76	10.00	11.54	38.46	
NOT LIKELY	0	25	18	8	15	6	72
	0.00	21.74	15.65	6.96	13.04	5.22	62.61
	0.00	34.72	25.00	11.11	20.83	8.33	
	0.00	80.65	85.71	80.00	57.69	23.08	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A15 BY ORG

A15(STUDYING PONDS AND STREAMS) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	6	3	0	9	1	20
	0.87	5.22	2.61	0.00	7.83	0.87	17.39
	5.00	30.00	15.00	0.00	45.00	5.00	
	100.00	19.35	14.29	0.00	34.62	3.85	
HIGHLY LIKELY	0	0	0	1	2	9	12
	0.00	0.00	0.00	0.87	1.74	7.83	10.43
	0.00	0.00	0.00	8.33	16.67	75.00	
	0.00	0.00	0.00	10.00	7.69	34.62	
SOMEWHAT LIKELY	0	2	1	4	6	10	23
	0.00	1.74	0.87	3.48	5.22	8.70	20.00
	0.00	8.70	4.35	17.39	26.09	43.48	
	0.00	6.45	4.76	40.00	23.08	38.46	
NOT LIKELY	0	23	17	5	9	6	60
	0.00	20.00	14.78	4.35	7.83	5.22	52.17
	0.00	38.33	28.33	8.33	15.00	10.00	
	0.00	74.19	80.95	50.00	34.62	23.08	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A16 BY ORG

A16(PROTECTING THE ROANOKE RIVER) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	5	1	6	2	19
	0.87	3.48	4.35	0.87	5.22	1.74	16.52
	5.26	21.05	26.32	5.26	31.58	10.53	
	100.00	12.90	23.81	10.00	23.08	7.69	
HIGHLY LIKELY	0	4	0	3	4	11	22
	0.00	3.48	0.00	2.61	3.48	9.57	19.13
	0.00	18.18	0.00	13.64	18.18	50.00	
	0.00	12.90	0.00	30.00	15.38	42.31	
SOMEWHAT LIKELY	0	20	10	3	12	9	54
	0.00	17.39	8.70	2.61	10.43	7.83	46.96
	0.00	37.04	18.52	5.56	22.22	16.67	
	0.00	64.52	47.62	30.00	46.15	34.62	
NOT LIKELY	0	3	6	3	4	4	20
	0.00	2.61	5.22	2.61	3.48	3.48	17.39
	0.00	15.00	30.00	15.00	20.00	20.00	
	0.00	9.68	28.57	30.00	15.38	15.38	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A17 BY ORG

A17(EXPLORING THE INSECT WORLD) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	5	4	0	8	1	19
	0.87	4.35	3.48	0.00	6.96	0.87	16.52
	5.26	26.32	21.05	0.00	42.11	5.26	
	100.00	16.13	19.05	0.00	30.77	3.85	
HIGHLY LIKELY	0	0	0	0	1	10	11
	0.00	0.00	0.00	0.00	0.87	8.70	9.57
	0.00	0.00	0.00	0.00	9.09	90.91	
	0.00	0.00	0.00	0.00	3.85	38.46	
SOMEWHAT LIKELY	0	1	3	4	6	9	23
	0.00	0.87	2.61	3.48	5.22	7.83	20.00
	0.00	4.35	13.04	17.39	26.09	39.13	
	0.00	3.23	14.29	40.00	23.08	34.62	
NOT LIKELY	0	25	14	6	11	6	62
	0.00	21.74	12.17	5.22	9.57	5.22	53.91
	0.00	40.32	22.58	9.68	17.74	9.68	
	0.00	80.65	66.67	60.00	42.31	23.08	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A18 BY ORG

A18(UNDERSTANDING AIR POLLUTION) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	6	0	6	2	19
	0.87	3.48	5.22	0.00	5.22	1.74	16.52
	5.26	21.05	31.58	0.00	31.58	10.53	
	100.00	12.90	28.57	0.00	23.08	7.69	
HIGHLY LIKELY	0	9	0	2	6	13	30
	0.00	7.83	0.00	1.74	5.22	11.30	26.09
	0.00	30.00	0.00	6.67	20.00	43.33	
	0.00	29.03	0.00	20.00	23.08	50.00	
SOMEWHAT LIKELY	0	13	8	4	12	6	43
	0.00	11.30	6.96	3.48	10.43	5.22	37.39
	0.00	30.23	18.60	9.30	27.91	13.95	
	0.00	41.94	38.10	40.00	46.15	23.08	
NOT LIKELY	0	5	7	4	2	5	23
	0.00	4.35	6.09	3.48	1.74	4.35	20.00
	0.00	21.74	30.43	17.39	8.70	21.74	
	0.00	16.13	33.33	40.00	7.69	19.23	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF A19 BY ORG

A19(PRESERVING OPEN SPACE) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	ENVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 4.55 100.00	6 5.22 27.27 19.35	5 4.35 22.73 23.81	0 0.00 0.00 0.00	8 6.96 36.36 30.77	2 1.74 9.09 7.69	22 19.13
HIGHLY LIKELY	0 0.00 0.00 0.00	2 1.74 10.53 6.45	1 0.87 5.26 4.76	4 3.48 21.05 40.00	4 3.48 21.05 15.38	8 6.96 42.11 30.77	19 16.52
SOMEWHAT LIKELY	0 0.00 0.00 0.00	13 11.30 31.71 41.94	6 5.22 14.63 28.57	2 1.74 4.88 20.00	11 9.57 26.83 42.31	9 7.83 21.95 34.62	41 35.65
NOT LIKELY	0 0.00 0.00 0.00	10 8.70 30.30 32.26	9 7.83 27.27 42.86	4 3.48 12.12 40.00	3 2.61 9.09 11.54	7 6.09 21.21 26.92	33 28.70
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF A20 BY ORG

A20(COMPOSTING ORGANIC WASTE) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	ENVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 5.56 100.00	7 6.09 38.89 22.58	2 1.74 11.11 9.52	0 0.00 0.00 0.00	5 4.35 27.78 19.23	3 2.61 16.67 11.54	18 15.65
HIGHLY LIKELY	0 0.00 0.00 0.00	2 1.74 12.50 6.45	4 3.48 25.00 19.05	1 0.87 6.25 10.00	5 4.35 31.25 19.23	4 3.48 25.00 15.38	16 13.91
SOMEWHAT LIKELY	0 0.00 0.00 0.00	10 8.70 26.32 32.26	9 7.83 23.68 42.86	1 0.87 2.63 10.00	11 9.57 28.95 42.31	7 6.09 18.42 26.92	38 33.04
NOT LIKELY	0 0.00 0.00 0.00	12 10.43 27.91 38.71	6 5.22 13.95 28.57	8 6.96 18.60 80.00	5 4.35 11.63 19.23	12 10.43 27.91 46.15	43 37.39
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF B1 BY ORG

B1(BIRDWATCHING) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	3	3	0	8	3	18
	0.87	2.61	2.61	0.00	6.96	2.61	15.65
	5.56	16.67	16.67	0.00	44.44	16.67	
	100.00	9.68	14.29	0.00	30.77	11.54	
HIGHLY LIKELY	0	1	6	1	1	4	13
	0.00	0.87	5.22	0.87	0.87	3.48	11.30
	0.00	7.69	46.15	7.69	7.69	30.77	
	0.00	3.23	28.57	10.00	3.85	15.38	
SOMEWHAT LIKELY	0	7	4	1	3	9	24
	0.00	6.09	3.48	0.87	2.61	7.83	20.87
	0.00	29.17	16.67	4.17	12.50	37.50	
	0.00	22.58	19.05	10.00	11.54	34.62	
NOT LIKELY	0	20	8	8	14	10	60
	0.00	17.39	6.96	6.96	12.17	8.70	52.17
	0.00	33.33	13.33	13.33	23.33	16.67	
	0.00	64.52	38.10	80.00	53.85	38.46	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B2 BY ORG

B2(IDENTIFYING OTHER WILDLIFE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	4	1	8	2	20
	0.87	3.48	3.48	0.87	6.96	1.74	17.39
	5.00	20.00	20.00	5.00	40.00	10.00	
	100.00	12.90	19.05	10.00	30.77	7.69	
HIGHLY LIKELY	0	1	0	0	1	4	6
	0.00	0.87	0.00	0.00	0.87	3.48	5.22
	0.00	16.67	0.00	0.00	16.67	66.67	
	0.00	3.23	0.00	0.00	3.85	15.38	
SOMEWHAT LIKELY	0	3	9	3	4	13	32
	0.00	2.61	7.83	2.61	3.48	11.30	27.83
	0.00	9.38	28.12	9.38	12.50	40.63	
	0.00	9.68	42.86	30.00	15.38	50.00	
NOT LIKELY	0	23	8	6	13	7	57
	0.00	20.00	6.96	5.22	11.30	6.09	49.57
	0.00	40.35	14.04	10.53	22.81	12.28	
	0.00	74.19	38.10	60.00	50.00	26.92	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B3 BY ORG

B3(IDENTIFYING BIRDS AT FEEDER) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	2	0	8	2	17
	0.87	3.48	1.74	0.00	6.96	1.74	14.78
	5.88	23.53	11.76	0.00	47.06	11.76	
	100.00	12.90	9.52	0.00	30.77	7.69	
HIGHLY LIKELY	0	3	7	1	3	6	20
	0.00	2.61	6.09	0.87	2.61	5.22	17.39
	0.00	15.00	35.00	5.00	15.00	30.00	
	0.00	9.68	33.33	10.00	11.54	23.08	
SOMEWHAT LIKELY	0	8	7	1	7	13	36
	0.00	6.96	6.09	0.87	6.09	11.30	31.30
	0.00	22.22	19.44	2.78	19.44	36.11	
	0.00	25.81	33.33	10.00	26.92	50.00	
NOT LIKELY	0	16	5	8	8	5	42
	0.00	13.91	4.35	6.96	6.96	4.35	36.52
	0.00	38.10	11.90	19.05	19.05	11.90	
	0.00	51.61	23.81	80.00	30.77	19.23	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B4 BY ORG

B4(PROTECTING WILDLIFE FROM HARM) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	3	4	0	8	2	18
	0.87	2.61	3.48	0.00	6.96	1.74	15.65
	5.56	16.67	22.22	0.00	44.44	11.11	
	100.00	9.68	19.05	0.00	30.77	7.69	
HIGHLY LIKELY	0	1	2	1	1	5	10
	0.00	0.87	1.74	0.87	0.87	4.35	8.70
	0.00	10.00	20.00	10.00	10.00	50.00	
	0.00	3.23	9.52	10.00	3.85	19.23	
SOMEWHAT LIKELY	0	13	4	3	8	13	41
	0.00	11.30	3.48	2.61	6.96	11.30	35.65
	0.00	31.71	9.76	7.32	19.51	31.71	
	0.00	41.94	19.05	30.00	30.77	50.00	
NOT LIKELY	0	14	11	6	9	6	46
	0.00	12.17	9.57	5.22	7.83	5.22	40.00
	0.00	30.43	23.91	13.04	19.57	13.04	
	0.00	45.16	52.38	60.00	34.62	23.08	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B5 BY ORG

B5(IMPROVING WILDLIFE HABITAT ON PROPERTY) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	3	5	0	12	2	23
	0.87	2.61	4.35	0.00	10.43	1.74	20.00
	4.35	13.04	21.74	0.00	52.17	8.70	
	100.00	9.68	23.81	0.00	46.15	7.69	
HIGHLY LIKELY	0	1	3	3	0	5	12
	0.00	0.87	2.61	2.61	0.00	4.35	10.43
	0.00	8.33	25.00	25.00	0.00	41.67	
	0.00	3.23	14.29	30.00	0.00	19.23	
SOMEWHAT LIKELY	0	11	4	4	8	10	37
	0.00	9.57	3.48	3.48	6.96	8.70	32.17
	0.00	29.73	10.81	10.81	21.62	27.03	
	0.00	35.48	19.05	40.00	30.77	38.46	
NOT LIKELY	0	16	9	3	6	9	43
	0.00	13.91	7.83	2.61	5.22	7.83	37.39
	0.00	37.21	20.93	6.98	13.95	20.93	
	0.00	51.61	42.86	30.00	23.08	34.62	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B6 BY ORG

B6(LANDSCAPING FOR WILDLIFE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	5	0	10	2	22
	0.87	3.48	4.35	0.00	8.70	1.74	19.13
	4.55	18.18	22.73	0.00	45.45	9.09	
	100.00	12.90	23.81	0.00	38.46	7.69	
HIGHLY LIKELY	0	1	4	0	0	6	11
	0.00	0.87	3.48	0.00	0.00	5.22	9.57
	0.00	9.09	36.36	0.00	0.00	54.55	
	0.00	3.23	19.05	0.00	0.00	23.08	
SOMEWHAT LIKELY	0	10	7	5	4	9	35
	0.00	8.70	6.09	4.35	3.48	7.83	30.43
	0.00	28.57	20.00	14.29	11.43	25.71	
	0.00	32.26	33.33	50.00	15.38	34.62	
NOT LIKELY	0	16	5	5	12	9	47
	0.00	13.91	4.35	4.35	10.43	7.83	40.87
	0.00	34.04	10.64	10.64	25.53	19.15	
	0.00	51.61	23.81	50.00	46.15	34.62	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B7 BY ORG

B7(USING NATIVE PLANTS FOR WILDLIFE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	4	1	10	1	21
	0.87	3.48	3.48	0.87	8.70	0.87	18.26
	4.76	19.05	19.05	4.76	47.62	4.76	
	100.00	12.90	19.05	10.00	38.46	3.85	
HIGHLY LIKELY	0	2	7	1	2	7	19
	0.00	1.74	6.09	0.87	1.74	6.09	16.52
	0.00	10.53	36.84	5.26	10.53	36.84	
	0.00	6.45	33.33	10.00	7.69	26.92	
SOMEWHAT LIKELY	0	4	6	3	4	8	25
	0.00	3.48	5.22	2.61	3.48	6.96	21.74
	0.00	16.00	24.00	12.00	16.00	32.00	
	0.00	12.90	28.57	30.00	15.38	30.77	
NOT LIKELY	0	21	4	5	10	10	50
	0.00	18.26	3.48	4.35	8.70	8.70	43.48
	0.00	42.00	8.00	10.00	20.00	20.00	
	0.00	67.74	19.05	50.00	38.46	38.46	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B8 BY ORG

B8(SHARING WILDLIFE ACTIVITIES WITH CHILDRE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	5	0	9	1	20
	0.87	3.48	4.35	0.00	7.83	0.87	17.39
	5.00	20.00	25.00	0.00	45.00	5.00	
	100.00	12.90	23.81	0.00	34.62	3.85	
HIGHLY LIKELY	0	1	0	1	1	15	18
	0.00	0.87	0.00	0.87	0.87	13.04	15.65
	0.00	5.56	0.00	5.56	5.56	83.33	
	0.00	3.23	0.00	10.00	3.85	57.69	
SOMEWHAT LIKELY	0	7	4	3	5	6	25
	0.00	6.09	3.48	2.61	4.35	5.22	21.74
	0.00	28.00	16.00	12.00	20.00	24.00	
	0.00	22.58	19.05	30.00	19.23	23.08	
NOT LIKELY	0	19	12	6	11	4	52
	0.00	16.52	10.43	5.22	9.57	3.48	45.22
	0.00	36.54	23.08	11.54	21.15	7.69	
	0.00	61.29	57.14	60.00	42.31	15.38	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B9 BY ORG

B9(PHOTOGRAPHING WILDLIFE) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 3.70 100.00	6 5.22 22.22 19.35	6 5.22 22.22 28.57	0 0.00 0.00 0.00	10 8.70 37.04 38.46	4 3.48 14.81 15.38	27 23.48
HIGHLY LIKELY	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.87 50.00 10.00	0 0.00 0.00 0.00	1 0.87 50.00 3.85	2 1.74
SOMEWHAT LIKELY	0 0.00 0.00 0.00	4 3.48 20.00 12.90	3 2.61 15.00 14.29	1 0.87 5.00 10.00	3 2.61 15.00 11.54	9 7.83 45.00 34.62	20 17.39
NOT LIKELY	0 0.00 0.00 0.00	21 18.26 31.82 67.74	12 10.43 18.18 57.14	8 6.96 12.12 80.00	13 11.30 19.70 50.00	12 10.43 18.18 46.15	66 57.39
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF B10 BY ORG

B10(PROTECTING ENDANGERED SPECIES) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 5.00 100.00	6 5.22 30.00 19.35	4 3.48 20.00 19.05	0 0.00 0.00 0.00	8 6.96 40.00 30.77	1 0.87 5.00 3.85	20 17.39
HIGHLY LIKELY	0 0.00 0.00 0.00	3 2.61 15.79 9.68	2 1.74 10.53 9.52	2 1.74 10.53 20.00	3 2.61 15.79 11.54	9 7.83 47.37 34.62	19 16.52
SOMEWHAT LIKELY	0 0.00 0.00 0.00	10 8.70 27.03 32.26	5 4.35 13.51 23.81	5 4.35 13.51 50.00	6 5.22 16.22 23.08	11 9.57 29.73 42.31	37 32.17
NOT LIKELY	0 0.00 0.00 0.00	12 10.43 30.77 38.71	10 8.70 25.64 47.62	3 2.61 7.69 30.00	9 7.83 23.08 34.62	5 4.35 12.82 19.23	39 33.91
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF B11 BY ORG

B11(WOODWORKING FOR WILDLIFE) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 4.55 100.00	6 5.22 27.27 19.35	3 2.61 13.64 14.29	0 0.00 0.00 0.00	10 8.70 45.45 38.46	2 1.74 9.09 7.69	22 19.13
HIGHLY LIKELY	0 0.00 0.00 0.00	1 0.87 8.33 3.23	1 0.87 8.33 4.76	1 0.87 8.33 10.00	2 1.74 16.67 7.69	7 6.09 58.33 26.92	12 10.43
SOMEWHAT LIKELY	0 0.00 0.00 0.00	6 5.22 30.00 19.35	2 1.74 10.00 9.52	0 0.00 0.00 0.00	5 4.35 25.00 19.23	7 6.09 35.00 26.92	20 17.39
NOT LIKELY	0 0.00 0.00 0.00	18 15.65 29.51 58.06	15 13.04 24.59 71.43	9 7.83 14.75 90.00	9 7.83 14.75 34.62	10 8.70 16.39 38.46	61 53.04
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF B12 BY ORG

B12(MANAGING PONDS FOR WILDLIFE) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 4.76 100.00	4 3.48 19.05 12.90	2 1.74 9.52 9.52	0 0.00 0.00 0.00	11 9.57 52.38 42.31	3 2.61 14.29 11.54	21 18.26
HIGHLY LIKELY	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.87 25.00 10.00	0 0.00 0.00 0.00	3 2.61 75.00 11.54	4 3.48
SOMEWHAT LIKELY	0 0.00 0.00 0.00	4 3.48 22.22 12.90	2 1.74 11.11 9.52	2 1.74 11.11 20.00	3 2.61 16.67 11.54	7 6.09 38.89 26.92	18 15.65
NOT LIKELY	0 0.00 0.00 0.00	23 20.00 31.94 74.19	17 14.78 23.61 80.95	7 6.09 9.72 70.00	12 10.43 16.67 46.15	13 11.30 18.06 50.00	72 62.61
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF B13 BY ORG

B13(FEEDING WILDLIFE IN WINTER) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	6	4	1	9	2	23
	0.87	5.22	3.48	0.87	7.83	1.74	20.00
	4.35	26.09	17.39	4.35	39.13	8.70	
	100.00	19.35	19.05	10.00	34.62	7.69	
HIGHLY LIKELY	0	4	5	1	4	9	23
	0.00	3.48	4.35	0.87	3.48	7.83	20.00
	0.00	17.39	21.74	4.35	17.39	39.13	
	0.00	12.90	23.81	10.00	15.38	34.62	
SOMEWHAT LIKELY	0	12	6	1	8	10	37
	0.00	10.43	5.22	0.87	6.96	8.70	32.17
	0.00	32.43	16.22	2.70	21.62	27.03	
	0.00	38.71	28.57	10.00	30.77	38.46	
NOT LIKELY	0	9	6	7	5	5	32
	0.00	7.83	5.22	6.09	4.35	4.35	27.83
	0.00	28.12	18.75	21.87	15.63	15.63	
	0.00	29.03	28.57	70.00	19.23	19.23	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B14 BY ORG

B14(CONTROLLING WILDLIFE PESTS/DAMAGE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	4	2	0	9	2	18
	0.87	3.48	1.74	0.00	7.83	1.74	15.65
	5.56	22.22	11.11	0.00	50.00	11.11	
	100.00	12.90	9.52	0.00	34.62	7.69	
HIGHLY LIKELY	0	1	2	1	5	3	12
	0.00	0.87	1.74	0.87	4.35	2.61	10.43
	0.00	8.33	16.67	8.33	41.67	25.00	
	0.00	3.23	9.52	10.00	19.23	11.54	
SOMEWHAT LIKELY	0	4	6	2	7	7	26
	0.00	3.48	5.22	1.74	6.09	6.09	22.61
	0.00	15.38	23.08	7.69	26.92	26.92	
	0.00	12.90	28.57	20.00	26.92	26.92	
NOT LIKELY	0	22	11	7	5	14	59
	0.00	19.13	9.57	6.09	4.35	12.17	51.30
	0.00	37.29	18.64	11.86	8.47	23.73	
	0.00	70.97	52.38	70.00	19.23	53.85	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B15 BY ORG

B15(PRESERVING WILDLIFE HABITAT) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 5.56 100.00	4 3.48 22.22 12.90	4 3.48 22.22 19.05	0 0.00 0.00 0.00	8 6.96 44.44 30.77	1 0.87 5.56 3.85	18 15.65
HIGHLY LIKELY	0 0.00 0.00 0.00	5 4.35 25.00 16.13	3 2.61 15.00 14.29	4 3.48 20.00 40.00	3 2.61 15.00 11.54	5 4.35 25.00 19.23	20 17.39
SOMEWHAT LIKELY	0 0.00 0.00 0.00	13 11.30 30.95 41.94	4 3.48 9.52 19.05	4 3.48 9.52 40.00	9 7.83 21.43 34.62	12 10.43 28.57 46.15	42 36.52
NOT LIKELY	0 0.00 0.00 0.00	9 7.83 25.71 29.03	10 8.70 28.57 47.62	2 1.74 5.71 20.00	6 5.22 17.14 23.08	8 6.96 22.86 30.77	35 30.43
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF B81 BY ORG

B81(PROGRAM ABOUT WILDLIFE AROUND HOMES/NEIG) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	16	8	8	16	6	55
	0.87	13.91	6.96	6.96	13.91	5.22	47.83
	1.82	29.09	14.55	14.55	29.09	10.91	
	100.00	51.61	38.10	80.00	61.54	23.08	
LIKELY	0	15	13	2	10	20	60
	0.00	13.04	11.30	1.74	8.70	17.39	52.17
	0.00	25.00	21.67	3.33	16.67	33.33	
	0.00	48.39	61.90	20.00	38.46	76.92	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B82 BY ORG

B82(PROGRAM ABOUT ENDANGERED SPECIES) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	25	17	5	24	11	83
	0.87	21.74	14.78	4.35	20.87	9.57	72.17
	1.20	30.12	20.48	6.02	28.92	13.25	
	100.00	80.65	80.95	50.00	92.31	42.31	
LIKELY	0	6	4	5	2	15	32
	0.00	5.22	3.48	4.35	1.74	13.04	27.83
	0.00	18.75	12.50	15.63	6.25	46.88	
	0.00	19.35	19.05	50.00	7.69	57.69	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B83 BY ORG

B83(PROGRAM ABOUT WILDLIFE IN PARKS & REFUGE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	29	19	7	24	13	93
	0.87	25.22	16.52	6.09	20.87	11.30	80.87
	1.08	31.18	20.43	7.53	25.81	13.98	
	100.00	93.55	90.48	70.00	92.31	50.00	
LIKELY	0	2	2	3	2	13	22
	0.00	1.74	1.74	2.61	1.74	11.30	19.13
	0.00	9.09	9.09	13.64	9.09	59.09	
	0.00	6.45	9.52	30.00	7.69	50.00	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B84 BY ORG

B84(PROGRAM-WILDLIFE PESTS AND DEALING W/ TH) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	27	13	10	20	23	94
	0.87	23.48	11.30	8.70	17.39	20.00	81.74
	1.06	28.72	13.83	10.64	21.28	24.47	
	100.00	87.10	61.90	100.00	76.92	88.46	
LIKELY	0	4	8	0	6	3	21
	0.00	3.48	6.96	0.00	5.22	2.61	18.26
	0.00	19.05	38.10	0.00	28.57	14.29	
	0.00	12.90	38.10	0.00	23.08	11.54	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF B85 BY ORG

B85(NO PROGRAM ON WILDLIFE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	0	19	15	6	12	21	73
	0.00	16.52	13.04	5.22	10.43	18.26	63.48
	0.00	26.03	20.55	8.22	16.44	28.77	
	0.00	61.29	71.43	60.00	46.15	80.77	
WOULD NOT SCHEDULE PROGRAM ON WLD.	1	12	6	4	14	5	42
	0.87	10.43	5.22	3.48	12.17	4.35	36.52
	2.38	28.57	14.29	9.52	33.33	11.90	
	100.00	38.71	28.57	40.00	53.85	19.23	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C1 BY ORG

C1(GUIDED NATURE WALK) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 3.85 100.00	6 5.22 23.08 19.35	7 6.09 26.92 33.33	0 0.00 0.00 0.00	9 7.83 34.62 34.62	3 2.61 11.54 11.54	26 22.61
HIGHLY LIKELY	0 0.00 0.00 0.00	1 0.87 5.56 3.23	4 3.48 22.22 19.05	2 1.74 11.11 20.00	1 0.87 5.56 3.85	10 8.70 55.56 38.46	18 15.65
SOMEWHAT LIKELY	0 0.00 0.00 0.00	6 5.22 27.27 19.35	5 4.35 22.73 23.81	1 0.87 4.55 10.00	5 4.35 22.73 19.23	5 4.35 22.73 19.23	22 19.13
NOT LIKELY	0 0.00 0.00 0.00	18 15.65 36.73 58.06	5 4.35 10.20 23.81	7 6.09 14.29 70.00	11 9.57 22.45 42.31	8 6.96 16.33 30.77	49 42.61
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF C2 BY ORG

C2(SLIDE PRESENTATION/TALK) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1 0.87 5.00 100.00	4 3.48 20.00 12.90	4 3.48 20.00 19.05	1 0.87 5.00 10.00	7 6.09 35.00 26.92	3 2.61 15.00 11.54	20 17.39
HIGHLY LIKELY	0 0.00 0.00 0.00	10 8.70 30.30 32.26	11 9.57 33.33 52.38	1 0.87 3.03 10.00	6 5.22 18.18 23.08	5 4.35 15.15 19.23	33 28.70
SOMEWHAT LIKELY	0 0.00 0.00 0.00	14 12.17 31.11 45.16	5 4.35 11.11 23.81	6 5.22 13.33 60.00	7 6.09 15.56 26.92	13 11.30 28.89 50.00	45 39.13
NOT LIKELY	0 0.00 0.00 0.00	3 2.61 17.65 9.68	1 0.87 5.88 4.76	2 1.74 11.76 20.00	6 5.22 35.29 23.08	5 4.35 29.41 19.23	17 14.78
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF C3 BY ORG

C3(FIELD TRIP) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	5	6	0	9	1	22
	0.87	4.35	5.22	0.00	7.83	0.87	19.13
	4.55	22.73	27.27	0.00	40.91	4.55	
	100.00	16.13	28.57	0.00	34.62	3.85	
HIGHLY LIKELY	0	2	6	2	0	16	26
	0.00	1.74	5.22	1.74	0.00	13.91	22.61
	0.00	7.69	23.08	7.69	0.00	61.54	
	0.00	6.45	28.57	20.00	0.00	61.54	
SOMEWHAT LIKELY	0	3	4	2	11	2	22
	0.00	2.61	3.48	1.74	9.57	1.74	19.13
	0.00	13.64	18.18	9.09	50.00	9.09	
	0.00	9.68	19.05	20.00	42.31	7.69	
NOT LIKELY	0	21	5	6	6	7	45
	0.00	18.26	4.35	5.22	5.22	6.09	39.13
	0.00	46.67	11.11	13.33	13.33	15.56	
	0.00	67.74	23.81	60.00	23.08	26.92	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C4 BY ORG

C4(ONE-SESSION WORKSHIP) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	5	8	0	10	3	27
	0.87	4.35	6.96	0.00	8.70	2.61	23.48
	3.70	18.52	29.63	0.00	37.04	11.11	
	100.00	16.13	38.10	0.00	38.46	11.54	
HIGHLY LIKELY	0	1	3	1	2	8	15
	0.00	0.87	2.61	0.87	1.74	6.96	13.04
	0.00	6.67	20.00	6.67	13.33	53.33	
	0.00	3.23	14.29	10.00	7.69	30.77	
SOMEWHAT LIKELY	0	8	5	8	6	9	36
	0.00	6.96	4.35	6.96	5.22	7.83	31.30
	0.00	22.22	13.89	22.22	16.67	25.00	
	0.00	25.81	23.81	80.00	23.08	34.62	
NOT LIKELY	0	17	5	1	8	6	37
	0.00	14.78	4.35	0.87	6.96	5.22	32.17
	0.00	45.95	13.51	2.70	21.62	16.22	
	0.00	54.84	23.81	10.00	30.77	23.08	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C5 BY ORG

C5(MOVIE OR VIDEO) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NOT SURE OR BLANK	1	5	6	0	8	3	23
	0.87	4.35	5.22	0.00	6.96	2.61	20.00
	4.35	21.74	26.09	0.00	34.78	13.04	
	100.00	16.13	28.57	0.00	30.77	11.54	
HIGHLY LIKELY	0	4	6	1	3	6	20
	0.00	3.48	5.22	0.87	2.61	5.22	17.39
	0.00	20.00	30.00	5.00	15.00	30.00	
	0.00	12.90	28.57	10.00	11.54	23.08	
SOMEWHAT LIKELY	0	16	6	5	9	10	46
	0.00	13.91	5.22	4.35	7.83	8.70	40.00
	0.00	34.78	13.04	10.87	19.57	21.74	
	0.00	51.61	28.57	50.00	34.62	38.46	
NOT LIKELY	0	6	3	4	6	7	26
	0.00	5.22	2.61	3.48	5.22	6.09	22.61
	0.00	23.08	11.54	15.38	23.08	26.92	
	0.00	19.35	14.29	40.00	23.08	26.92	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C6 BY ORG

C6(NEWSPAPER) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	8	4	0	7	5	25
	0.87	6.96	3.48	0.00	6.09	4.35	21.74
	4.00	32.00	16.00	0.00	28.00	20.00	
	100.00	25.81	19.05	0.00	26.92	19.23	
YES, LIKELY	0	23	17	10	19	21	90
	0.00	20.00	14.78	8.70	16.52	18.26	78.26
	0.00	25.56	18.89	11.11	21.11	23.33	
	0.00	74.19	80.95	100.00	73.08	80.77	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C7 BY ORG

C7(RADIO) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	22	13	4	16	18	74
	0.87	19.13	11.30	3.48	13.91	15.65	64.35
	1.35	29.73	17.57	5.41	21.62	24.32	
	100.00	70.97	61.90	40.00	61.54	69.23	
YES, LIKELY	0	9	8	6	10	8	41
	0.00	7.83	6.96	5.22	8.70	6.96	35.65
	0.00	21.95	19.51	14.63	24.39	19.51	
	0.00	29.03	38.10	60.00	38.46	30.77	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C8 BY ORG

C8(TELEVISION) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	18	9	4	14	16	62
	0.87	15.65	7.83	3.48	12.17	13.91	53.91
	1.61	29.03	14.52	6.45	22.58	25.81	
	100.00	58.06	42.86	40.00	53.85	61.54	
YES, LIKELY	0	13	12	6	12	10	53
	0.00	11.30	10.43	5.22	10.43	8.70	46.09
	0.00	24.53	22.64	11.32	22.64	18.87	
	0.00	41.94	57.14	60.00	46.15	38.46	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C9 BY ORG

C9(ADULT EDUCATION BROCHURE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	19	11	6	18	16	71
	0.87	16.52	9.57	5.22	15.65	13.91	61.74
	1.41	26.76	15.49	8.45	25.35	22.54	
	100.00	61.29	52.38	60.00	69.23	61.54	
YES, LIKELY	0	12	10	4	8	10	44
	0.00	10.43	8.70	3.48	6.96	8.70	38.26
	0.00	27.27	22.73	9.09	18.18	22.73	
	0.00	38.71	47.62	40.00	30.77	38.46	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C10 BY ORG

C10(PARK SYSTEM NEWSLETTER) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	21	13	6	17	19	77
	0.87	18.26	11.30	5.22	14.78	16.52	66.96
	1.30	27.27	16.88	7.79	22.08	24.68	
	100.00	67.74	61.90	60.00	65.38	73.08	
YES, LIKELY	0	10	8	4	9	7	38
	0.00	8.70	6.96	3.48	7.83	6.09	33.04
	0.00	26.32	21.05	10.53	23.68	18.42	
	0.00	32.26	38.10	40.00	34.62	26.92	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C11 BY ORG

C11(TIME ALLOWED FOR PROGRAM) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	3	2	0	5	4	15
	0.87	2.61	1.74	0.00	4.35	3.48	13.04
	6.67	20.00	13.33	0.00	33.33	26.67	
	100.00	9.68	9.52	0.00	19.23	15.38	
< 20 MIN.	0	4	0	1	4	1	10
	0.00	3.48	0.00	0.87	3.48	0.87	8.70
	0.00	40.00	0.00	10.00	40.00	10.00	
	0.00	12.90	0.00	10.00	15.38	3.85	
20 MIN.	0	8	4	0	3	3	18
	0.00	6.96	3.48	0.00	2.61	2.61	15.65
	0.00	44.44	22.22	0.00	16.67	16.67	
	0.00	25.81	19.05	0.00	11.54	11.54	
30 MIN.	0	12	6	3	6	7	34
	0.00	10.43	5.22	2.61	5.22	6.09	29.57
	0.00	35.29	17.65	8.82	17.65	20.59	
	0.00	38.71	28.57	30.00	23.08	26.92	
45 MIN.	0	4	5	5	5	9	28
	0.00	3.48	4.35	4.35	4.35	7.83	24.35
	0.00	14.29	17.86	17.86	17.86	32.14	
	0.00	12.90	23.81	50.00	19.23	34.62	
> 45 MIN.	0	0	4	1	3	2	10
	0.00	0.00	3.48	0.87	2.61	1.74	8.70
	0.00	0.00	40.00	10.00	30.00	20.00	
	0.00	0.00	19.05	10.00	11.54	7.69	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C12 BY ORG

C12(QUESTION/ANSWER SESSION INCLUDED) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	2	3	0	6	4	16
	0.87	1.74	2.61	0.00	5.22	3.48	13.91
	6.25	12.50	18.75	0.00	37.50	25.00	
	100.00	6.45	14.29	0.00	23.08	15.38	
YES	0	24	16	9	20	20	89
	0.00	20.87	13.91	7.83	17.39	17.39	77.39
	0.00	26.97	17.98	10.11	22.47	22.47	
	0.00	77.42	76.19	90.00	76.92	76.92	
NO	0	5	2	1	0	2	10
	0.00	4.35	1.74	0.87	0.00	1.74	8.70
	0.00	50.00	20.00	10.00	0.00	20.00	
	0.00	16.13	9.52	10.00	0.00	7.69	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C13 BY ORG

C13(ADDITIONAL TIME ALLOWED) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	12	6	6	12	10	47
	0.87	10.43	5.22	5.22	10.43	8.70	40.87
	2.13	25.53	12.77	12.77	25.53	21.28	
	100.00	38.71	28.57	60.00	46.15	38.46	
YES	0	17	15	4	12	15	63
	0.00	14.78	13.04	3.48	10.43	13.04	54.78
	0.00	26.98	23.81	6.35	19.05	23.81	
	0.00	54.84	71.43	40.00	46.15	57.69	
NO	0	2	0	0	2	1	5
	0.00	1.74	0.00	0.00	1.74	0.87	4.35
	0.00	40.00	0.00	0.00	40.00	20.00	
	0.00	6.45	0.00	0.00	7.69	3.85	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C14 BY ORG

C14(WILLING TO PAY MINIMAL FEE) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	2	2	0	5	4	14
	0.87	1.74	1.74	0.00	4.35	3.48	12.17
	7.14	14.29	14.29	0.00	35.71	28.57	
	100.00	6.45	9.52	0.00	19.23	15.38	
YES	0	4	13	1	2	10	30
	0.00	3.48	11.30	0.87	1.74	8.70	26.09
	0.00	13.33	43.33	3.33	6.67	33.33	
	0.00	12.90	61.90	10.00	7.69	38.46	
NO	0	16	0	4	9	4	33
	0.00	13.91	0.00	3.48	7.83	3.48	28.70
	0.00	48.48	0.00	12.12	27.27	12.12	
	0.00	51.61	0.00	40.00	34.62	15.38	
UNSURE	0	9	6	5	10	8	38
	0.00	7.83	5.22	4.35	8.70	6.96	33.04
	0.00	23.68	15.79	13.16	26.32	21.05	
	0.00	29.03	28.57	50.00	38.46	30.77	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF C15 BY ORG

C15(AMOUNT WILLING TO PAY) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1 0.87 7.14 100.00	2 1.74 14.29 6.45	2 1.74 14.29 9.52	0 0.00 0.00 0.00	5 4.35 35.71 19.23	4 3.48 28.57 15.38	14 12.17
< $5	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.87 100.00 3.85	0 0.00 0.00 0.00	1 0.87
$5-$9	0 0.00 0.00 0.00	1 0.87 12.50 3.23	3 2.61 37.50 14.29	0 0.00 0.00 0.00	2 1.74 25.00 7.69	2 1.74 25.00 7.69	8 6.96
$10-$14	0 0.00 0.00 0.00	3 2.61 37.50 9.68	4 3.48 50.00 19.05	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.87 12.50 3.85	8 6.96
$15-$19	0 0.00 0.00 0.00	0 0.00 0.00 0.00	5 4.35 71.43 23.81	0 0.00 0.00 0.00	1 0.87 14.29 3.85	1 0.87 14.29 3.85	7 6.09
$20-$25	0 0.00 0.00 0.00	2 1.74 16.67 6.45	3 2.61 25.00 14.29	1 0.87 8.33 10.00	0 0.00 0.00 0.00	6 5.22 50.00 23.08	12 10.43
NOT SURE	0 0.00 0.00 0.00	4 3.48 19.05 12.90	1 0.87 4.76 4.76	5 4.35 23.81 50.00	6 5.22 28.57 23.08	5 4.35 23.81 19.23	21 18.26
NOT WILLING TO PAY A FEE	0 0.00 0.00 0.00	19 16.52 43.18 61.29	3 2.61 6.82 14.29	4 3.48 9.09 40.00	11 9.57 25.00 42.31	7 6.09 15.91 26.92	44 38.26
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

TABLE OF FREQ BY ORG

FREQ(HOW OFTEN GROUP MEETS) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	2	1	0	4	5	13
	0.87	1.74	0.87	0.00	3.48	4.35	11.30
	7.69	15.38	7.69	0.00	30.77	38.46	
	100.00	6.45	4.76	0.00	15.38	19.23	
1/WEEK	0	5	0	0	0	0	5
	0.00	4.35	0.00	0.00	0.00	0.00	4.35
	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	16.13	0.00	0.00	0.00	0.00	
2/MONTH	0	13	0	0	0	0	13
	0.00	11.30	0.00	0.00	0.00	0.00	11.30
	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	41.94	0.00	0.00	0.00	0.00	
1/MONTH	0	10	20	7	13	3	53
	0.00	8.70	17.39	6.09	11.30	2.61	46.09
	0.00	18.87	37.74	13.21	24.53	5.66	
	0.00	32.26	95.24	70.00	50.00	11.54	
BIMONTHLY	0	1	0	0	2	12	15
	0.00	0.87	0.00	0.00	1.74	10.43	13.04
	0.00	6.67	0.00	0.00	13.33	80.00	
	0.00	3.23	0.00	0.00	7.69	46.15	
3-4/YEAR	0	0	0	1	7	6	14
	0.00	0.00	0.00	0.87	6.09	5.22	12.17
	0.00	0.00	0.00	7.14	50.00	42.86	
	0.00	0.00	0.00	10.00	26.92	23.08	
1-2/YEAR	0	0	0	2	0	0	2
	0.00	0.00	0.00	1.74	0.00	0.00	1.74
	0.00	0.00	0.00	100.00	0.00	0.00	
	0.00	0.00	0.00	20.00	0.00	0.00	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF ORG BY ORG

ORG(TYPE OF ORGANIZATION) ORG(TYPE OF ORGANIZATION)

Frequency / Percent	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF SEX BY ORG

SEX(PREDOMINANT SEX IN ORG) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	1	1	0	4	3	10
	0.87	0.87	0.87	0.00	3.48	2.61	8.70
	10.00	10.00	10.00	0.00	40.00	30.00	
	100.00	3.23	4.76	0.00	15.38	11.54	
MOST OR ALL MEMBERS ARE MALE	0	13	0	0	0	0	13
	0.00	11.30	0.00	0.00	0.00	0.00	11.30
	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	41.94	0.00	0.00	0.00	0.00	
MOST OR ALL FEMALE	0	11	14	0	2	2	29
	0.00	9.57	12.17	0.00	1.74	1.74	25.22
	0.00	37.93	48.28	0.00	6.90	6.90	
	0.00	35.48	66.67	0.00	7.69	7.69	
MIXED	0	6	6	10	20	21	63
	0.00	5.22	5.22	8.70	17.39	18.26	54.78
	0.00	9.52	9.52	15.87	31.75	33.33	
	0.00	19.35	28.57	100.00	76.92	80.77	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF AGE BY ORG

AGE(PREDOMINANT AGE RANGE IN ORG) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	1	1	0	4	4	11
	0.87	0.87	0.87	0.00	3.48	3.48	9.57
	9.09	9.09	9.09	0.00	36.36	36.36	
	100.00	3.23	4.76	0.00	15.38	15.38	
18-24	0	2	0	0	0	0	2
	0.00	1.74	0.00	0.00	0.00	0.00	1.74
	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	6.45	0.00	0.00	0.00	0.00	
35-54	0	8	4	6	4	9	31
	0.00	6.96	3.48	5.22	3.48	7.83	26.96
	0.00	25.81	12.90	19.35	12.90	29.03	
	0.00	25.81	19.05	60.00	15.38	34.62	
55 & UP	0	10	11	0	10	0	31
	0.00	8.70	9.57	0.00	8.70	0.00	26.96
	0.00	32.26	35.48	0.00	32.26	0.00	
	0.00	32.26	52.38	0.00	38.46	0.00	
MIXED AGE	0	10	5	4	8	13	40
	0.00	8.70	4.35	3.48	6.96	11.30	34.78
	0.00	25.00	12.50	10.00	20.00	32.50	
	0.00	32.26	23.81	40.00	30.77	50.00	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF RACE BY ORG

RACE(PREDOMINANT ETHNIC GROUP IN ORG) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	2	2	0	5	3	13
	0.87	1.74	1.74	0.00	4.35	2.61	11.30
	7.69	15.38	15.38	0.00	38.46	23.08	
	100.00	6.45	9.52	0.00	19.23	11.54	
MIXED	0	3	0	1	3	19	26
	0.00	2.61	0.00	0.87	2.61	16.52	22.61
	0.00	11.54	0.00	3.85	11.54	73.08	
	0.00	9.68	0.00	10.00	11.54	73.08	
MOST OR ALL ARE BLACK	0	0	0	1	7	1	9
	0.00	0.00	0.00	0.87	6.09	0.87	7.83
	0.00	0.00	0.00	11.11	77.78	11.11	
	0.00	0.00	0.00	10.00	26.92	3.85	
MOST OR ALL ARE WHITE	0	26	19	8	11	3	67
	0.00	22.61	16.52	6.96	9.57	2.61	58.26
	0.00	38.81	28.36	11.94	16.42	4.48	
	0.00	83.87	90.48	80.00	42.31	11.54	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF MEET BY ORG

MEET(WHEN MEETINGS ARE HELD) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	3	1	0	6	5	16
	0.87	2.61	0.87	0.00	5.22	4.35	13.91
	6.25	18.75	6.25	0.00	37.50	31.25	
	100.00	9.68	4.76	0.00	23.08	19.23	
WK PM	0	20	2	8	18	21	69
	0.00	17.39	1.74	6.96	15.65	18.26	60.00
	0.00	28.99	2.90	11.59	26.09	30.43	
	0.00	64.52	9.52	80.00	69.23	80.77	
WK DAY	0	8	15	1	1	0	25
	0.00	6.96	13.04	0.87	0.87	0.00	21.74
	0.00	32.00	60.00	4.00	4.00	0.00	
	0.00	25.81	71.43	10.00	3.85	0.00	
WKEND PM	0	0	0	1	0	0	1
	0.00	0.00	0.00	0.87	0.00	0.00	0.87
	0.00	0.00	0.00	100.00	0.00	0.00	
	0.00	0.00	0.00	10.00	0.00	0.00	
WKEND DAY	0	0	3	0	1	0	4
	0.00	0.00	2.61	0.00	0.87	0.00	3.48
	0.00	0.00	75.00	0.00	25.00	0.00	
	0.00	0.00	14.29	0.00	3.85	0.00	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF OFTEN BY ORG

OFTEN(FREQ OF ENVIRONMENTAL PROGRAMS NOW) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	4	2	0	8	3	18
	0.87	3.48	1.74	0.00	6.96	2.61	15.65
	5.56	22.22	11.11	0.00	44.44	16.67	
	100.00	12.90	9.52	0.00	30.77	11.54	
< 1/YEAR	0	12	5	3	13	18	51
	0.00	10.43	4.35	2.61	11.30	15.65	44.35
	0.00	23.53	9.80	5.88	25.49	35.29	
	0.00	38.71	23.81	30.00	50.00	69.23	
1-2/YEAR	0	13	7	2	5	3	30
	0.00	11.30	6.09	1.74	4.35	2.61	26.09
	0.00	43.33	23.33	6.67	16.67	10.00	
	0.00	41.94	33.33	20.00	19.23	11.54	
3-5/YEAR	0	2	5	0	0	0	7
	0.00	1.74	4.35	0.00	0.00	0.00	6.09
	0.00	28.57	71.43	0.00	0.00	0.00	
	0.00	6.45	23.81	0.00	0.00	0.00	
6-8/YEAR	0	0	2	1	0	0	3
	0.00	0.00	1.74	0.87	0.00	0.00	2.61
	0.00	0.00	66.67	33.33	0.00	0.00	
	0.00	0.00	9.52	10.00	0.00	0.00	
ALL PROG	0	0	0	4	0	2	6
	0.00	0.00	0.00	3.48	0.00	1.74	5.22
	0.00	0.00	0.00	66.67	0.00	33.33	
	0.00	0.00	0.00	40.00	0.00	7.69	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF PROG BY ORG

PROG(# OF PROGRAMS A YEAR) ORG(TYPE OF ORGANIZATION)

Frequency / Percent / Row Pct / Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	1	4	2	0	7	4	18
	0.87	3.48	1.74	0.00	6.09	3.48	15.65
	5.56	22.22	11.11	0.00	38.89	22.22	
	100.00	12.90	9.52	0.00	26.92	15.38	
1-5	0	2	0	4	13	17	36
	0.00	1.74	0.00	3.48	11.30	14.78	31.30
	0.00	5.56	0.00	11.11	36.11	47.22	
	0.00	6.45	0.00	40.00	50.00	65.38	
6	0	3	1	0	2	1	7
	0.00	2.61	0.87	0.00	1.74	0.87	6.09
	0.00	42.86	14.29	0.00	28.57	14.29	
	0.00	9.68	4.76	0.00	7.69	3.85	
8-9	0	5	16	3	3	1	28
	0.00	4.35	13.91	2.61	2.61	0.87	24.35
	0.00	17.86	57.14	10.71	10.71	3.57	
	0.00	16.13	76.19	30.00	11.54	3.85	
12	0	5	2	3	1	1	12
	0.00	4.35	1.74	2.61	0.87	0.87	10.43
	0.00	41.67	16.67	25.00	8.33	8.33	
	0.00	16.13	9.52	30.00	3.85	3.85	
24	0	8	0	0	0	0	8
	0.00	6.96	0.00	0.00	0.00	0.00	6.96
	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	25.81	0.00	0.00	0.00	0.00	
50	0	4	0	0	0	2	6
	0.00	3.48	0.00	0.00	0.00	1.74	5.22
	0.00	66.67	0.00	0.00	0.00	33.33	
	0.00	12.90	0.00	0.00	0.00	7.69	
Total	1	31	21	10	26	26	115
	0.87	26.96	18.26	8.70	22.61	22.61	100.00

TABLE OF NUM BY ORG

NUM(FREQUENCY OF ENVIRONMENTAL PROGRAMS IN FUTURE) ORG(TYPE OF ORGANIZATION)

Frequency Percent Row Pct Col Pct	UNKNOWN	CIVIC	GARDEN	EVIRON	NEIGHBOR	ED/PTA	Total
NO RESPONSE	0 0.00 0.00 0.00	4 3.48 23.53 12.90	5 4.35 29.41 23.81	0 0.00 0.00 0.00	6 5.22 35.29 23.08	2 1.74 11.76 7.69	17 14.78
NONE	1 0.87 9.09 100.00	0 0.00 0.00 0.00	1 0.87 9.09 4.76	2 1.74 18.18 20.00	4 3.48 36.36 15.38	3 2.61 27.27 11.54	11 9.57
1 TO 2	0 0.00 0.00 0.00	19 16.52 32.76 61.29	9 7.83 15.52 42.86	3 2.61 5.17 30.00	12 10.43 20.69 46.15	15 13.04 25.86 57.69	58 50.43
3 TO 5	0 0.00 0.00 0.00	7 6.09 38.89 22.58	5 4.35 27.78 23.81	0 0.00 0.00 0.00	3 2.61 16.67 11.54	3 2.61 16.67 11.54	18 15.65
6 TO 8	0 0.00 0.00 0.00	1 0.87 20.00 3.23	1 0.87 20.00 4.76	1 0.87 20.00 10.00	1 0.87 20.00 3.85	1 0.87 20.00 3.85	5 4.35
9 OR >	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	4 3.48 66.67 40.00	0 0.00 0.00 0.00	2 1.74 33.33 7.69	6 5.22
Total	1 0.87	31 26.96	21 18.26	10 8.70	26 22.61	26 22.61	115 100.00

Vita

Susan Stansbury Leslie was born on September 12, 1949 in Norfolk, Virginia. She was graduated from George Wythe High School in Richmond, Virginia in 1967. Suzie attended the University of Richmond, where she was graduated with Honors in Psychology in 1971. In 1975, she completed an M.A. in Curriculum and Instruction with a concentration in teaching the learning disabled from Virginia Polytechnic Institute and State University. Suzie taught in the public schools in Virginia for six years as a Title I reading resource teacher, a third and fourth grade classroom teacher, and a resource room and self-contained teacher for children with learning disabilities. From 1978 to 1984, she served as Learning Consultant on a Child Study Team serving several public school districts in New Jersey. Suzie left education in 1984 to become owner/innkeeper of Pineapple Hill Bed and Breakfast Country Inn in Bucks County, Pennsylvania with her husband, Randy. After selling the inn five years later, Suzie again enrolled in a Masters program at Virginia Polytechnic Institute and State University, this time in the Department of Fisheries and Wildlife Sciences. Her master's work dealt with selecting environmental education programs for adult organizations. Susan completed the requirements for a Master of Science Degree in January of 1993.

Susan S. Leslie