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**A COMPARISON OF MEMBERSHIP GOALS AND ATTITUDES
BETWEEN THREE MEMBERSHIP GROUPS IN THE
MICHIGAN UNITED CONSERVATION CLUBS**

By

Raymond Alan Rustem

A THESIS

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ABSTRACT

A COMPARISON OF MEMBERSHIP GOALS AND ATTITUDES BETWEEN THREE MEMBERSHIP GROUPS IN THE MICHIGAN UNITED CONSERVATION CLUBS

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The Michigan United Conservation Clubs membership was surveyed in 1988 to assess membership attitudes and goals. Four distinct groups of members were identified using membership type, interest in joining clubs and method of membership recruitment. Significant differences were identified in age structure, family orientation, political activity, outdoor recreation, magazine readership and environmental attitude values.

Traditional club and subscriber members were highly active in outdoor recreation, particularly hunting and fishing and joined other organizations with similar interests. Political participation and political helplessness were influenced by local club membership. Subscribers seeking to join local clubs have high interest in community, youth and family activity opportunities.

New MUCC members, attracted through door to door solicitation represented a departure from traditional members. Solicited members possessed lower utilitarian and higher ecologicistic attitudes. They also had lower outdoor recreation participation. Less than forty percent hunted or fished during the previous year.

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INTRODUCTION

The first major volunteer conservation organization in the United States developed out of concern for the decline of native fish and game species (Trefethen, 1975). The New York Sportsmen's Club, founded in 1844, was unlike many of its predecessors. The club was dedicated to the "protection and preservation of game". Its first established objectives included the elimination of both the spring shooting of game birds and sale of game.

As the success of this first venture became known, local conservation and game protection associations began to form across the United States. During the first North American Wildlife Conference in 1935 Jay "Ding" Darling announced the plan for a General Wildlife Federation consisting of organizations from the 6000 existing clubs (Fox 1981). The plan envisioned a system of state associations sending delegates to a national organization. A number of individual states began to form coalitions.

The Michigan United Conservation Clubs (MUCC) was one of the organizations established as a result of this national movement. It was initiated in 1937 by a group of local sportsmen clubs from across the state. The MUCC replaced an earlier coalition, the Michigan Sportsmen's

Association, as the leading conservation organization in Michigan. During the next fifty years MUCC expanded to embrace over 400 organizations located through out the state.

In 1947, the organization began publishing Michigan-Out-of-Doors magazine as a communications tool for its members. During the early period, membership in MUCC was limited to members of affiliated organizations. It was not until 1964 that memberships became available to individuals not associated with an affiliated club. Nonclub members could purchase a yearly subscription to the magazine. A portion of the subscription payment was assessed as MUCC membership dues.

These new subscriber/members did not possess the same privileges as club members. Subscription memberships (Individual Associate Members or IAMs) were given opportunity to speak before the annual convention and board of Directors but held no voting privileges. This situation has not changed and thus IAMs have less influence on decisions directing organization policies.

A second major revival of the conservation-environmental movement occurred following the celebration of "Earth Day" in 1970. National awareness of natural resources issues was suddenly awakened. The 1970s also saw a sharp increase in membership numbers and citizens environmental organizations (Fox, 1981).

MUCC also benefitted during this arousal of environmental conscience. The organization reached its highest total membership in the early 70s, exceeding 130,000. This included over 400 affiliated organizations with nearly 50,000 members and 80,000 IAMs.

The intervening years have seen a decrease in MUCC membership. The most dramatic drop has been in the club memberships. From its high in the early seventies club memberships dropped to 35,000 and have remained nearly stationary. After its initial drop the IAM membership began to increase and now equals the early 1970s total.

During this period MUCC ran several surveys through its magazine. These surveys were intended primarily for advertising background. They provided little information beyond demographic and outdoor equipment ownership. No formal survey of the MUCC membership has ever been conducted.

Recognizing a need to expand their membership base, MUCC began to conduct a door to door solicitation campaign in 1986. Household residents were approached by a canvasser who discussed current environmental issues. The resident was subsequently asked to either join or donate money to support MUCC. Members added by this method received Michigan-Out-of-Doors magazine and were classified as IAMs by MUCC. The manner in which these "Solicited" members were encouraged to join and the issues used in persuasion were

designed to appeal to individuals who would not normally consider joining MUCC. At the time of the survey the total number of solicited members represented less than 3% of the entire MUCC membership.

In 1987, attempting to gain an understanding of the declining club membership and to better serve the interests of the organization, MUCC contracted with the Department of Fisheries and Wildlife, Michigan State University, to conduct a survey of its members.

The major goals of the study were to:

1. obtain demographic information of both MUCC club and IAMs (age, education level, occupation, and family information).
2. collect data pertaining to MUCC members recreation activities and activity levels.
- 3) determine members' attitudes towards MUCC activities.
- 4) assess the importance placed on ecological, utilitarian and other environmental values of MUCC members.
- 5) compare differences in recreation patterns between club members and two types of IAMs.
- 6) compare political values and attitudes between club members and two types of IAMs.
- 7) identify the number of IAMs interested in joining clubs and the types of activities and facilities they are seeking.
- 8) identify facilities and activities offered by existing clubs.

LITERATURE REVIEW

The study of volunteers and volunteer organizations has received considerable attention from such disciplines as sociology, political science and psychology. Two bibliographies are available on recent studies of volunteers and volunteer organizations (Knoke 1986, Smith 1975). A common problem faced by many researchers has been the classification of a volunteer and volunteer associations. A minimal definition offered by D. Knoke (1986) is useful to describe the application of these terms used in this study. Volunteer organizations are "formally organized, named groups most of whose members-whether persons or organizations-are not financially recompensed for their participation."

Research reviewed with relevance to this project are classified under six subcategories; organizational history and theory, typologies, association members, association maintenance and implications of organized public.

Organizational history and theory.

A study of Washington based groups found fifty percent of the citizens groups founded since 1830 were formed after

1940 (Walker 1983). A primary reason given for this growth was the increase in political patronage in the United States. As communications improved it became easier for groups to support candidates who express their views and lobby those who expressed opposite views. As a result the number and diversity of interest groups increased. The MUCC is an example of an organization formed to express and support political views. Since its inception, MUCC's has been involved in political action in the areas of fish and wildlife management, gun ownership, and environmental concerns.

Michigan's role as a manufacturing center may have influenced the development of the MUCC. Smith (1973) found a strong correlation between the amount of industrialization and membership in volunteer organizations. Industrialized areas and societies provide better communication networks, leading to the greater exchange of ideas. This exchange allows the development of groups with common purposes and the formation of volunteer organizations.

Organizational formation has also been described using ecological models (Hannan 1977). Organizations act as evolving species forming to fill voids or niches of social interest. As in an ecosystem, they compete for a limited resource, (memberships). An example of this model might involve the formation of a local park association due to the perceived lack of interest in park plans. The group forms

because they perceive an open niche in the existing organizational ecosystem. The success of these groups depends largely on the appropriateness of their perceptions and their ability to compete for the limited membership resource.

In its inception MUCC formed out of a similar perceived need. It was successful in competing for the membership resources available in the state. During the ensuing years several other similar organizations have begun filling certain niches of environmental interest. The competition for the membership resource has increased. In order to compete and remain viable MUCC will need to adapt to the changing needs of potential members.

Typologies

One problem in studying volunteer organizations has been the variation within the definition. A literal application of Knoke's definition makes no distinction between church, conservation or union groups. Some questions on the appropriateness of comparing church or union against strictly volunteer groups using a single inclusive definition does exist. In numerous instances, religious organizations have been excluded. The main argument has been the ascriptive and involuntary nature of these memberships (Smith 1975). Attempts to solve this problem have been based on placing volunteer organizations

into types. These classifications have been based on either function (Rose 1954) or benefits to the members (Bell and Force 1956).

Using a comprehensive technique, Gordon and Babchuk (1959) used factors such as organizational aim, function and membership to define a typology. Organizations whose aims were attuned to social influence were categorized as instrumental, while those whose aims were primarily to furnish activities for the membership were designated expressive.

A third category, expressive-instrumental, encompassed organizations possessing both social influence and membership activity objectives. Because of the magazine published by MUCC and affiliate clubs facilities, MUCC best fits this category of organizations.

Association Members

Research conducted on voluntary organizations often includes information related to individual members. Quantifying this membership information provides a basis for market evaluation of members currently being attracted to the organization. Data collected on members can also be utilized to adapt to changing membership markets or to attract new market segments.

An abundant amount of information is available on the demographics of volunteer members. One of the most common

variables measured is membership age. Studies indicate a disproportionate age structure in voluntary associations. Participation was found to increase as age increased. This continued until ages 35-44 (Cutler 1976). As age increases beyond this point participation remains stable and then begins to decline in later years (Curtis 1971). Bultena and Wood (1970) have identified varying effects of age in different types of organizations. Instrumental organizations tend to lose older members to a greater degree than expressive organizations.

Hausenecht (1962) posits the increase in participation for young adults as a ramification of their integration into adult society. The decrease found in later years similarly follows the increased detachment from society shown by older groups.

Taking a separate approach, Lansing and Kish (1957) proposed an alternative measurement to age data. Their study advanced the concept of categorizing individuals into one of seven "Family Life Cycle" stages. The stages were defined according to age, marital status, and whether the individual had children. A national study applying this technique found the expected relationships, which remained constant across other variables such as age and sex (Knoke and Thompson 1977). Participation was found to increase as individuals were married and entered the working world. It decreased as children were born and family unit activities

increased. Participation again increased with the entry of the last child into the school system.

Several studies have indicated the reduced likelihood of membership in organizations by individuals of low status groups (Palisi and Jacobsen 1977, McPherson 1981). High status individuals use memberships for social integration. These studies also identified a shorter duration of affiliation from low status individuals who chose to join.

Several other demographic variables have been tested for affects on membership affiliation. Variables having the most significant impacts include sex (Booth 1972), length of residence (Zimmer 1955), marital status (Scott 1957) and community size (Babchuk and Edwards 1965). A portrait of the average member provided by the findings in these studies can be summarized as male, middle aged, married and a long term resident of the community (Verba and Nie 1972, Hyman and Wright 1971).

The best measurement of demographic correlations has been the center of considerable discussion. Most studies have focused on the individual impact of a few variables. Studies using multivariate analyses indicated a great deal of interaction between variables (McPherson and Lockwood 1980). In these analysis the length of residence was the only major factor not affected by other demographic variables (Edwards and White 1980).

Studies which examined reasons for joining

organizations have spurred a great deal of discussion. The principal question in this debate remains. Will the achievement of a collective good¹ provide enough motivation for individuals to join (Truman 1951), or do members require motivation by the provision of selective benefits (Olson 1965)? Olson presents the most extreme view proposing that only organizations selling private or noncollective products or provide social or recreational benefits to individual members would have a source of rewards to offer potential members. Mitchell (1979) categorizes private goods as either goods or services, sociability, social status, or self esteem. Application of this concept would predict that MUCC could only exist so long as it continued to provide a magazine or other private good. A separate study identified two of the most common goods sought by potential members as increase in satisfaction and influence (Coleman 1973).

Models which identify the achievement of collective goods as the primary motivation require an additional assumption. These individuals must assume others will also make a similar decision and in numbers high enough to be successful (Collard 1978, Hardin 1982). It is difficult to believe that many people would contribute to a "lost cause".

Another area of investigation has involved incidental societal influences on organization members. Membership has

¹ A collective good is defined as a good in which many people benefit with or without contributing to achievement of the good (Olsen 1965, Truman 1951).

been linked to increased self esteem (Aberback 1969, Mitchell 1979), voting (Almond and Verba 1963, Alford and Scoble 1968) and political activity (Nisbet 1962).

As an organization with a primary interest in influencing political and management decisions, it is imperative that MUCC members either maintain or increase their activity level. Information on MUCC's success in this area can greatly influence its ability to achieve its goals.

Youths, as well as adults show positive influences from membership in volunteer organizations. Membership in youth organizations has been connected with socialization into adult society (Hanks and Eckland 1978) and increased political and voting activity in later life (Hanks 1981).

Association Maintenance

Even within social influence organizations whose primary goals are aimed at altering societal conditions, concern must be given to membership commitment and recruitment. Commitment is not reached only by attaining public policies, (Browne 1977). Successful groups will seek out what they can offer, what potential members want and what opportunities exist to supply these desires.

Membership commitment is dependent on the organization's ability to reach the necessary level of member satisfaction.

The influence of membership control is one of the major factors influencing organizational commitment. Increased

control in organizational decisions is positively correlated with member commitment (Hougland and Wood 1980). In large organizations where much of the decision making process is centralized in a hired staff, this may be difficult to provide. Knoke (1981) suggests communication, to some degree, can offset the absence of involvement in the policy process. Further research has also shown large organizations have greater potential to attract more committed members (McPherson 1983).

All organizations face a constant erosion of members. Historically, occupational and social networks were influential in maintaining member recruitment (Snow et. al. 1980). More recently, direct mail campaigns have been used extensively in membership campaigns. One advantage of direct mail members is their greater commitment and increased motivation through changes in public policy (Godwin and Mitchell, 1984).

Implications of Organized Publics

During a fifty year period between 1930 and 1980 the number of political lobbying organizations in Washington D.C. tripled (Walker 1983). Conservation and environmental protection were just one of the many concerns being advanced by this rise in political advocacy. Organized conservationists influenced creation of national parks, wildlife refuges as well as laws protecting herons, egrets

and raptors (Trefethen 1975). In Michigan, advocacy organizations have promoted decisions to insure the nonpartisanship of department directors and wildlife management issues as well as to protect wetlands, sand dunes and impose deposits on beverage containers.

Organized associations of citizens are continually adopting new policies aimed at accomplishing organizational goals. Acting as a focus for individuals and smaller organizations, they have been effective in altering policy decisions. Their influence has added a new dimension to state and national resource managers. Current resource management has broadened its concern for social implications when considering biologic choices of policy decisions.

From the perspective of resource managers, it is important to be able to identify interest groups and predict their actions. The state of new York has identified at least 211 separate organizations interested in some aspect of wildlife management (Brown and Decker 1982). Such diverse interests can quickly dilute agency resources unless the agency can predict reactions of separate groups. A resource agency which can predict reaction to management plans may be able to design communication strategies that encourage support (Smolka and Decker 1983). Managers will also be able to anticipate supporting organization to better direct information efforts at unsupportive groups.

In order to accomplish its objectives an organization

must also understand members. Providing the opportunities to achieve individual goals and providing desired goods and services can increase both membership commitment and motivate action.

A sound public interest group assesses the changes in its members needs. It adapts over time to meet the changing needs. To remain viable it also searches for members and adapts to successfully compete to retain them.

METHODS

Two survey versions were developed for the study (Appendix B). One version was sent to club members, while a slightly different version was distributed to IAM and solicited members.

The two surveys varied in questions concerning club membership. Club members responded to questions pertaining to their current club membership. These included how individuals had been recruited as well as activities and programs they believed important to their club membership. IAMs and solicited members were asked to identify whether they had ever been past members of clubs and if so reasons for leaving. They were also questioned on their interest in joining a club and the activities or programs affecting their choice of a club. Programs desired by current club members and those of potential members were compared to predict the probable success of clubs to attract members.

The remainder of the questions used in both surveys were identical. Data were gathered on member demographics, family orientation and recreation patterns. Interest in conservation issues was measured by questions on MUCC's involvement and membership in other conservation organizations. Members were also asked to indicate expected

future and past involvement in issues as a measurement of interest. In addition, information was collected on political activity as well as perceptions of political "helplessness" (Gameson 1961). Items involving attitudes and importance were measured using a five point Likert scale (Likert 1932).

Surveys to both groups included a measure of the respondent's value priorities concerning natural resources. The measure used four attitude domains identified by Kellert (1980). The attitude domains selected were Humanistic, Ecologicistic, Utilitarian and Moralistic values based on MUCC's organization and primary objectives.

Respondents were presented with a scenario and asked to indicate, on a five point Likert scale, the importance of four statements related to utilitarian, moralistic, ecologicistic, and humanistic domains.

An attempt was also made to identify reasons individuals chose not to renew memberships. IAMs were asked to indicate whether they had been a member of any affiliate clubs. Those indicating prior club membership were asked to rank the importance of several items stating reasons for non-renewal.

A pilot survey consisting of 50 club members and IAMs was developed and mailed in October 1986. Responses were evaluated and several modifications were made to the final survey.

The primary change in the final survey was the inclusion of a second item to assess attitude domains. When given the option to rate items on a five point Likert scale many of the respondents rated the importance of items equally. Although these results provided some important insights, changes were incorporated to increase the amount of information. A second question asked respondents to rank the attitude domain statements in order of importance.

To assess significance, a combination of the importance ranking and Likert scale score were used. Statements identified as most important in the ranking items were given a score of 4. The second, third and fourth most important statement were scored 3, 2, 1 respectively. This score was then multiplied by the Likert score for the same statement to obtain an attitude value score. The attitude value scores were used in comparisons between membership groups.

The final random selection members included 1014 club members and 1004 IAMs. Since the total number of solicited members represented less than three percent of the entire MUCC membership. A smaller number (200) of solicited members was selected to obtain a representative sample from this group.

The first mailings of surveys occurred in early February. Approximately two weeks later a reminder card was mailed to all survey recipients (Appendix C). In mid April, a second survey identical to the first was sent to those

members not responding. A final reminder notice accompanied by a self addressed "nonresponse" postcard was sent in May to nonrespondents. This postcard asked the recipients to indicate the reason(s) why they did not wish to respond.

The total response rate after all mailings was lower than desired, (club members 52.7%, IAMs 55.8% and Solicited members 41%). As a measure to determine nonresponse bias a telephone survey was conducted. Ten questions from the survey were selected to be used in the survey (Appendix D). Fifty each of the club and IAM nonrespondents were selected for the survey along with fifteen of the non-respondents from the solicited group. Members were selected using an nth name selection. Attempts to obtain telephone numbers were made by searching available directories and by contacting local information services. If neither of these sources produced a useable phone number the next nonrespondent on the list was taken. This was repeated until a useable phone number was obtained. A maximum of five attempts were made to contact each member in the telephone survey.

The data entry for the responses was accomplished with a digitizing pad utilizing a program to assign numbers for various responses. The data were subsequently converted to a SAS data set for analysis. Comparisons of data with simple means were completed with the Chi-square tests. All other comparisons of ranks and various levels of activity

were analyzed using the Kruskal-Wallis, ranked sums of scores. Differences were determined to be significant at a ninety-five percent confidence limit ($P < \text{or } = \text{to } 0.05$).

The membership types are not equally represented in the total MUCC membership. Currently, the number of IAMs is twice the number of club members. Solicited members, at the time of the survey constituted less than three percent of the entire membership. When estimating overall averages for MUCC membership IAMs were weighted by a factor of two.

RESULTS

Response

A total of 58.5% of the members receiving a survey either responded by returning a completed questionnaire or a nonresponse card (Table 1). The highest overall return rate, which included both surveys and non response cards was received from IAMs (62.2%) followed by club members (56.6%) and finally solicited members (49%). No significant difference in questionnaire return rate was found between club members (52.7%) and IAMs (55.8%). Solicited members responded at a lower return rate with only 41% of the surveys being returned.

Nonrespondents

One hundred twenty survey recipients did return a nonresponse card. Sixty-six of the cards were returned by IAMs. Eleven of these requested another survey and six others indicated they had returned a survey. Club members returned 43 cards with eleven requesting another survey and five indicating they had responded earlier. Two of the sixteen nonresponse cards returned by solicited members requested another survey (Table 1).

The most frequent reason given for nonresponse by both IAMs (57.7%) and club members (49.0%) was not wanting to

Table 1. Summary of survey and nonrespondents mailings with corresponding response rates.

	Club Members	IAM Members	Solicited Members
Total survey recipients	1014	1004	200
Usable surveys returned¹	530	553	81
Unusable surveys	4	7	1
Percent return	52.7	55.8	41
Total non response card recipients	484	444	118
Non response card returns	40	64	16
Percent return	8.3	14.4	13.6
Total Responses	574	624	98
Total percent response	56.6	62.2	49

¹ The total omits eight surveys which could not be identified as IAM or solicited and four surveys returned after the data was entered.

answer questions about their personal lives (Table 2). Solicited members most often indicated they did not have time to fill out the survey (85.7%). The least frequently given reason for nonresponse across all three memberships was believing the survey had no value.

Table 2. Reasons indicated on the nonresponse card for not completing the survey.

Reason	Percentage		
	Club (n=40)	IAM (n=64)	Solicited (n=16)
I do not have time to fill out the survey	14.0	23.4	75.0
I do not believe the survey will be of any value.	6.0	4.4	7.7
I do not wish to answer questions about my personal life.	22.0	37.5	27.0
Other reason.	18.0	17.2	7.7
Please send another survey.	22.0	14.1	0.0

Nonrespondents Telephone Survey

A total of 101 nonrespondents were successfully contacted by telephone. Most of those contacted were cooperative with the questions. The greatest resistance came from nonrespondent IAMs. Nine of the 43 contacts (21%) refused to respond. Both club (9%, respondents=36) and solicited (8%, respondents=14) members had a lower percentage of refusal. This is in contrast to the higher response rate IAMs had in returning the nonresponse card (14.4%) when compared to club members (8.3%).

Club member nonrespondents showed no significant difference from respondents when indicating the importance of three reasons for joining MUCC (Table 3). IAM

nonrespondents were less likely to indicate receiving the magazine as an important reason and conversely more likely to indicate having a voice in conservation politics as important. The sample size (n=14) of the solicited membership was too small to indicate any significance.

Nonrespondent club members differed significantly in their attitudes towards MUCC activities in conservation education and gun control lobbying (Table 3). IAM nonrespondents were not significantly different from respondents in their attitudes towards MUCC's programs.

None of the club or solicited members contacted by phone were less than 25 years of age (Fig 1). Nonrespondents for both club and IAM members tended to be older than respondents. Nearly one-fourth of both the club members (22.7%) and IAMs (25.7%) indicated ages over 65 years old. Club and IAM respondents over 65 constituted 11.9% and 15.9% of their groups respectively. The telephone survey had no solicited members over 65. All other age categories were comparable in response.

Table 3. Comparison of percentage between mail and phone survey respondents on selected survey items for club members and IAMs.*

Variable	Club member		IAMs	
	mail	phone (n=35)	mail	phone (n=34)
Joined MUCC to receive magazine ^b	52.6	48.6	79.2	54.3
Joined MUCC to support programs ^a	44.8	45.9	50.2	31.4
Joined MUCC to have a voice in conservation politics ^b	55.9	64.9	39.6	62.9
Should MUCC do more for conservation education ^a	58.2	67.6	66.2	78.8
Should MUCC do more on gun control lobbying ^a	52.6	63.9	48.8	51.7
Should MUCC do more in protecting Great Lakes	81.3	91.7	89.8	90.9
Should MUCC do more in protecting air quality	70.8	75.0	85.5	78.8
Should MUCC do more in protecting angler/hunter rights	80.0	77.8	78.7	71.9

^aThe variable responses differ significantly (P<0.05) between club members mail and phone surveys.

^bThe variable responses differ significantly (P<0.05) between club members mail and phone surveys.

*Results of statistical significance tests are reported in Appendix E.

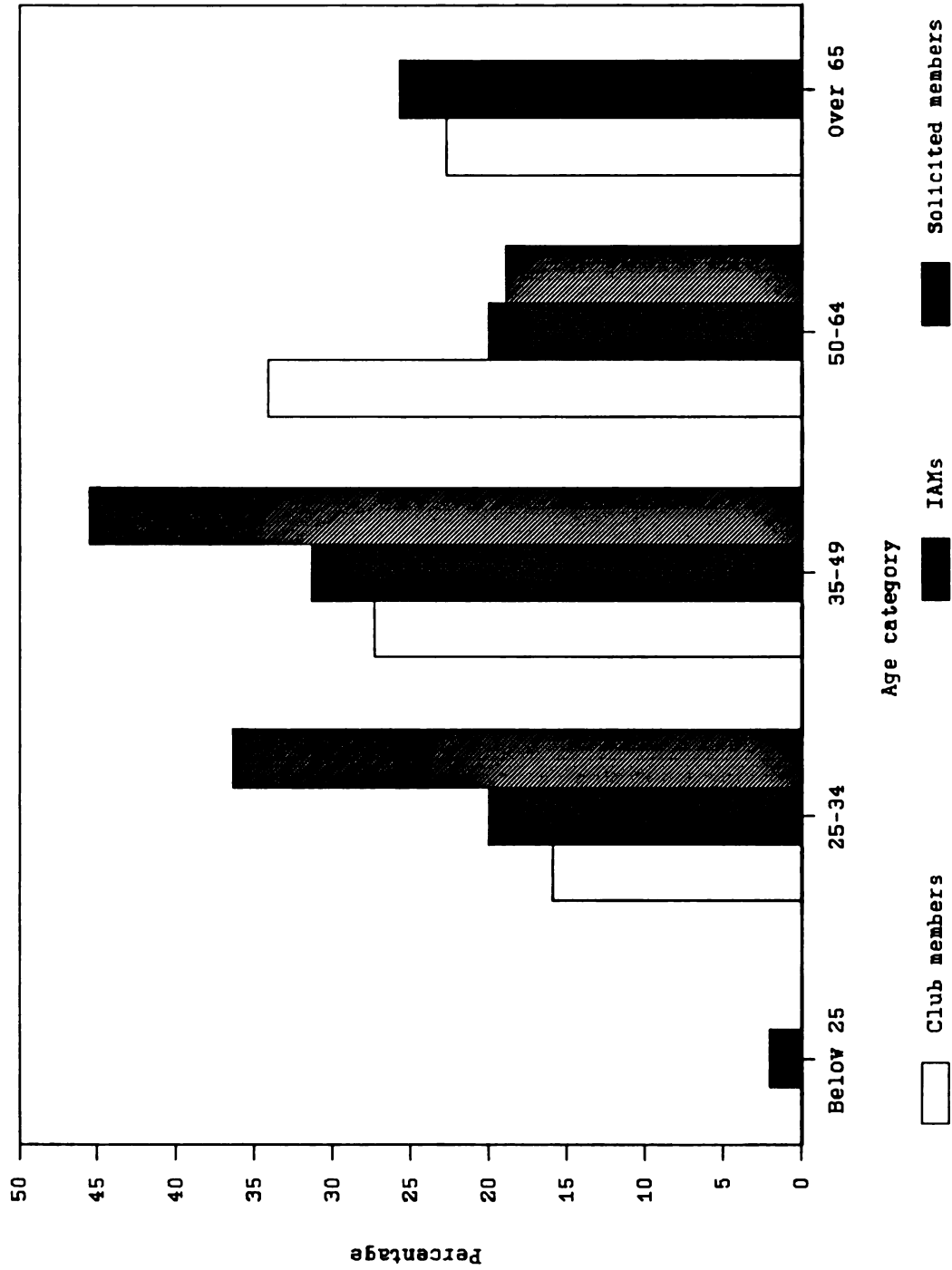


Figure 1. Percent age distribution for phone survey respondents.

Mail Survey Respondents

Age

The mean age of all survey respondents was forty-eight years of age (Std. Dev.=14.8, n=1132). The age category distribution shows an increasing percentage after age twenty, with membership peaking between 30 and 44 years of age (Figure 2)². The largest membership age category consisted of individuals over 65 years old (14.5%). No difference was found in the mean membership age of club members (48.06 +/-13.68, respondents=515) and IAMs (48.22 +/- 15.32, respondents=541). Solicited members had a slightly lower mean age of 44 (Std. dev.=12.52, n=76).

Significant differences were found in the distribution of five year age classes between membership groups (Figure 3). The percentage for club members increases over the five year increments peaking with 16.4% of the club members in the 40 to 45 year age category. Clubs had a higher percentage of members with ages between 35 and 50 when compared to IAMs ($X^2=16.48$, $df=1$, $P<.001$). The percentage declines with a slight increase in membership after age 65 (11.9%).

The IAM age distribution shows an increasing percentage with age at the 25 to 34 year old age category with a peak at 30 to 34 years.

²Solicited membership represents less than three percent of all MUCC memberships and were not used to calculate the age distribution information.

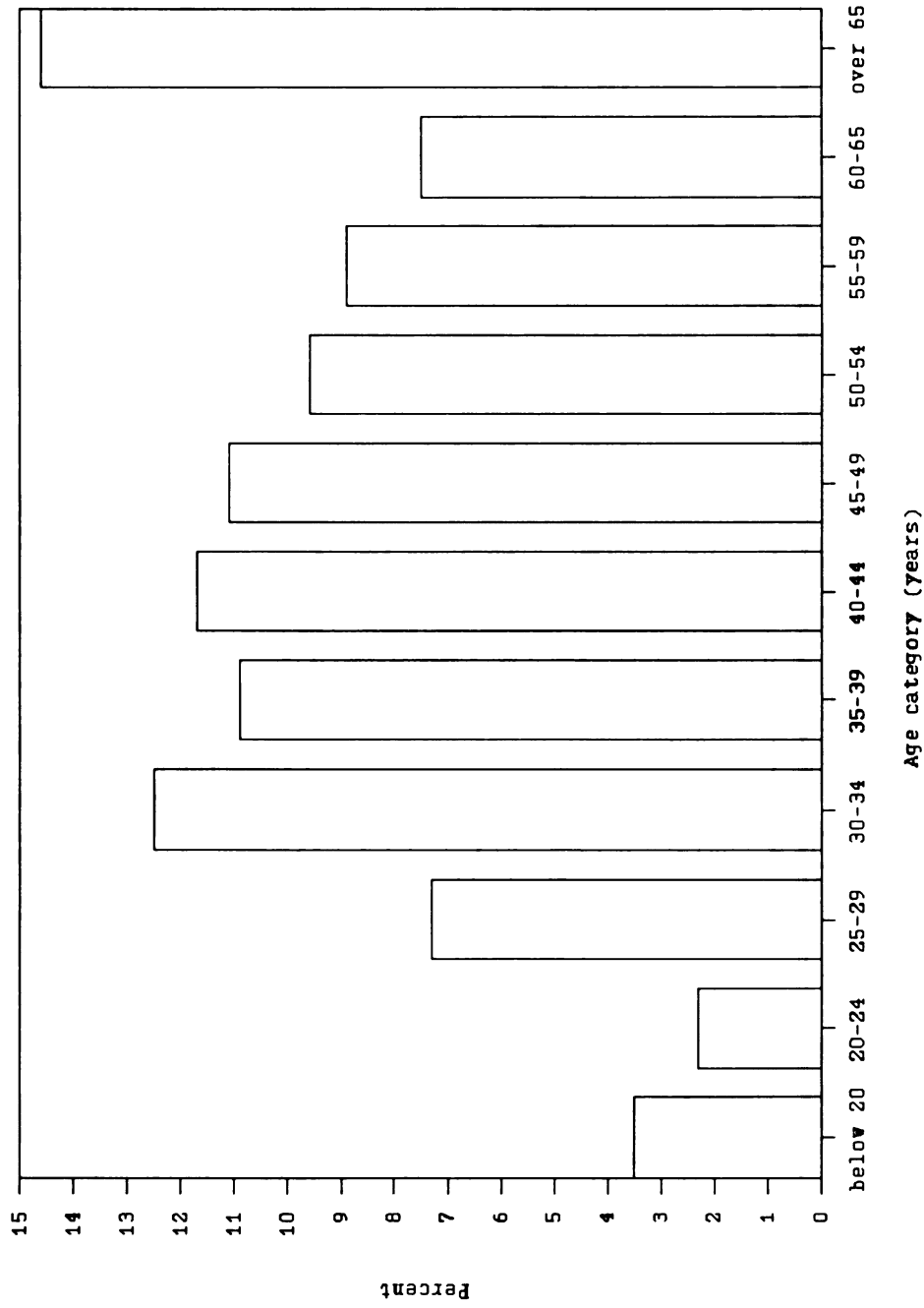


Figure 2. Age distribution of NUCC members.

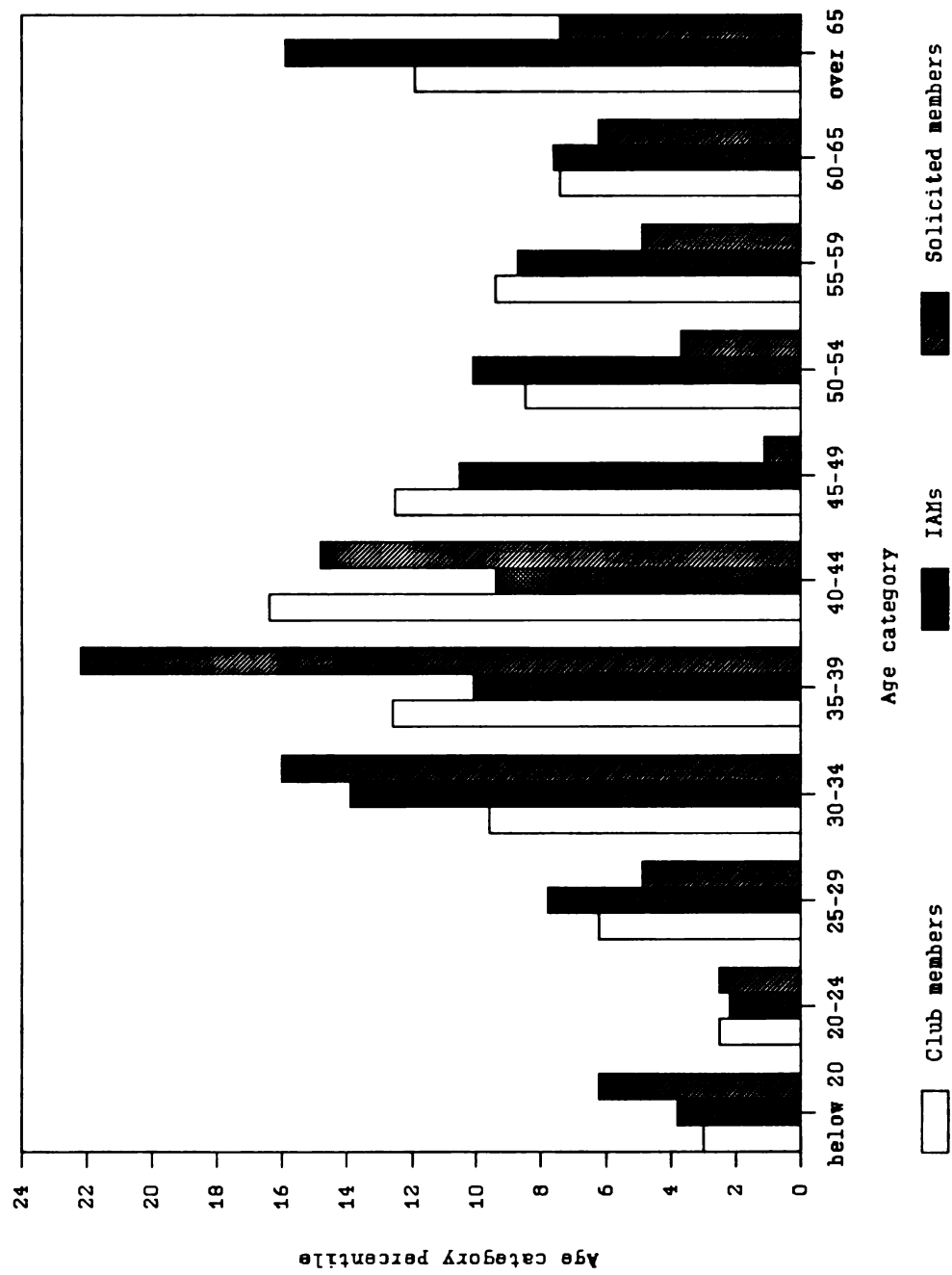


Figure 3. Comparison of age distribution percentage for NUCC membership groups.

Members over 65 comprised the largest IAM age group (16%).

Age distribution of solicited members was vastly different with 22.2% of these members falling into the 35 to 39 age category. Over fifty percent of the solicited members were represented in the 30-40 year age categories. Less than two percent of the solicited members were represented in the 45-49 year age category. Unlike the club and IAM memberships. There was no substantial increase in the percentage of solicited members over 65.

Sex

The MUCC is a male dominated organization with a 97.2% male membership (respondents=1141). No difference was found between sex distribution in club memberships (96.7%, respondents =522) and IAMs (98.3%, respondents=542). The solicited group held a higher female membership (45.5%, respondents=77), ($X^2=258.69$, $df=2$, $P<.001$).

Education

Ninety percent of the MUCC members have completed a high school education with 24% of the respondents (n=1137) reporting they had completed a college degree (Figure 4). This compares to 64.9 percent of Michigan residents, over twenty-five graduating high school and 14.3% completing a college program (U.S. Dept. of Commerce 1980).

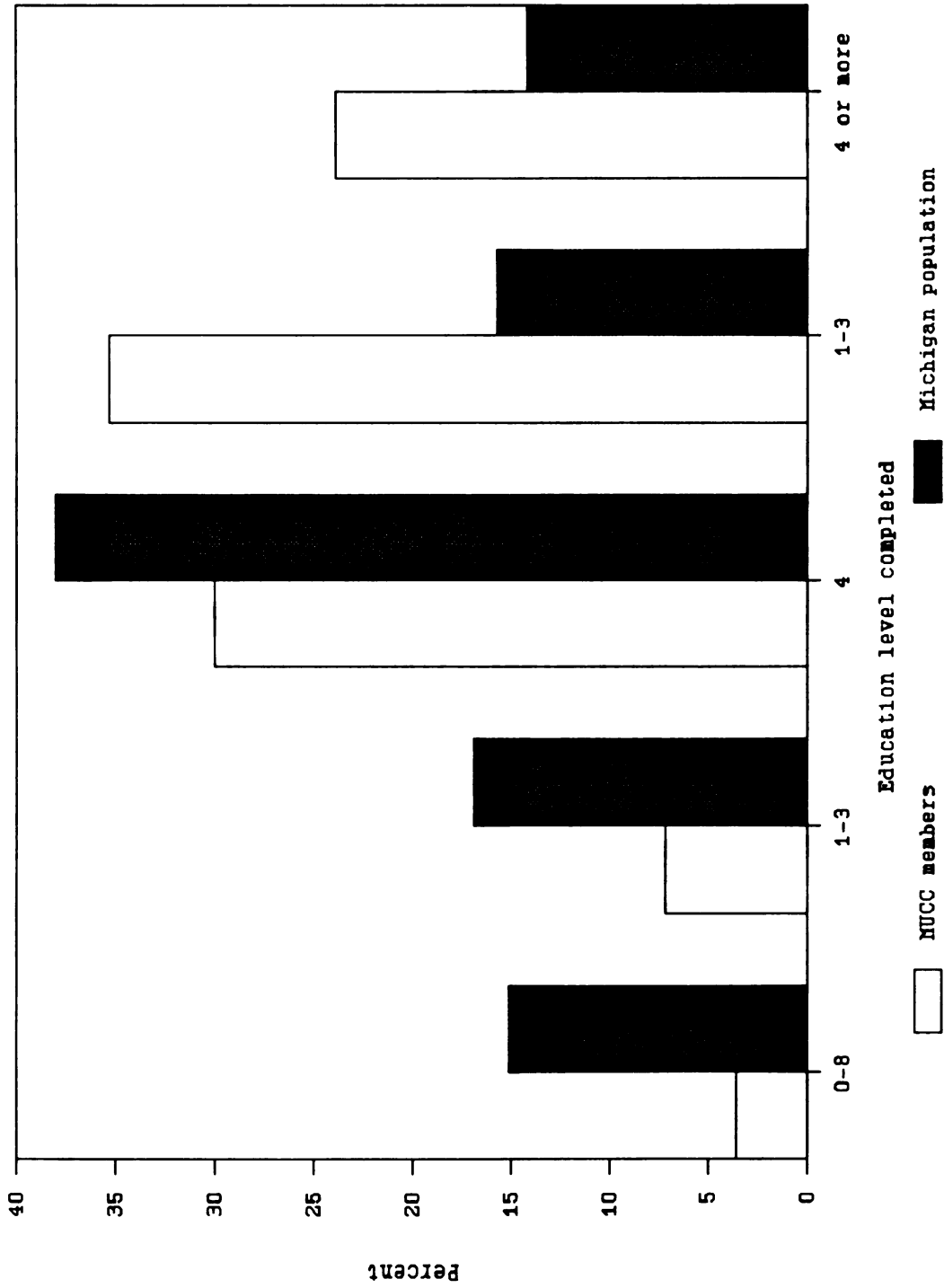


Figure 4. Comparison of education levels completed for MUCC and the Michigan residents over twenty-five years old.

A comparison of education levels showed no difference between club members (n=521) and IAMs (n=539), ($X^2=2.47$, $df=1$, $P=0.11$) (Figure 5). The primary educational differences occurred when comparing these club members ($X^2=28.43$, $df=1$, $P<.001$) and IAMs ($X^2=36.20$, $df=1$, $P<.001$) to the solicited members. Fifty percent of the solicited members (n=77) reported graduating from college with 29% obtaining advanced degrees (M.S. Ph.D M.D. D.V.M. etc.).

Income

The average median family income in the midwest is \$22,000 per year (U.S. Dept. of Commerce 1985). Seventy-eight percent of MUCC members (n=1038) reported family incomes exceeding \$25,000 (Figure 6). Solicited members (n=73) again were significantly different from both club members (n=484) and IAMs (n=481), ($X^2=13.02$, $df=2$, $P=.002$). Forty-one percent of the solicited members had household incomes above \$55,000. This compares with 25% of club members and 24.7% of IAM households with incomes in the same range.

Occupation

Retirees constitute the largest percentage (over 20%) of reported occupation categories among MUCC members (Table 4). An additional thirty percent of the members indicated either working in factory or managerial positions.

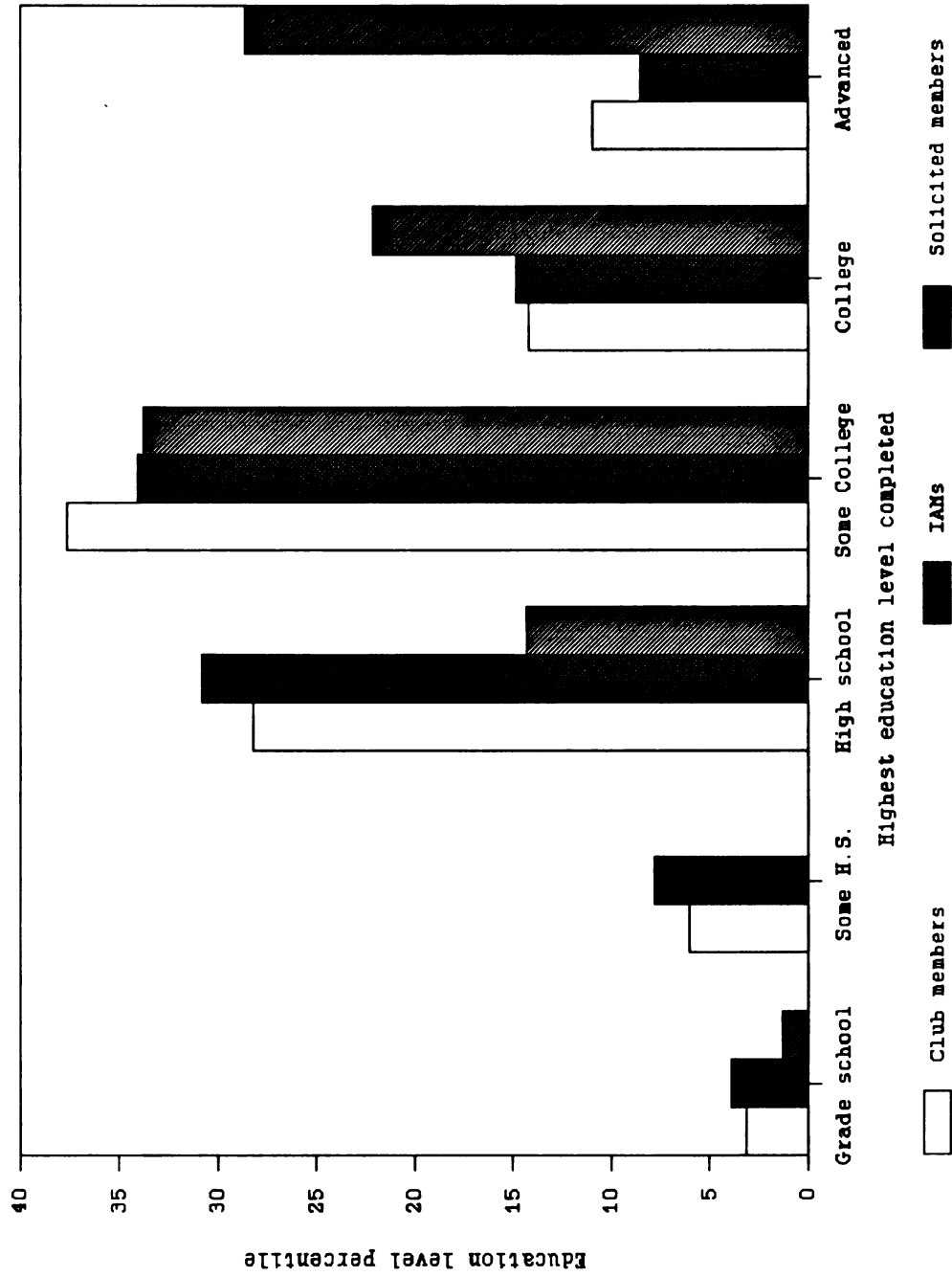


Figure 5. Comparison of education levels for three membership groups in MUCC.

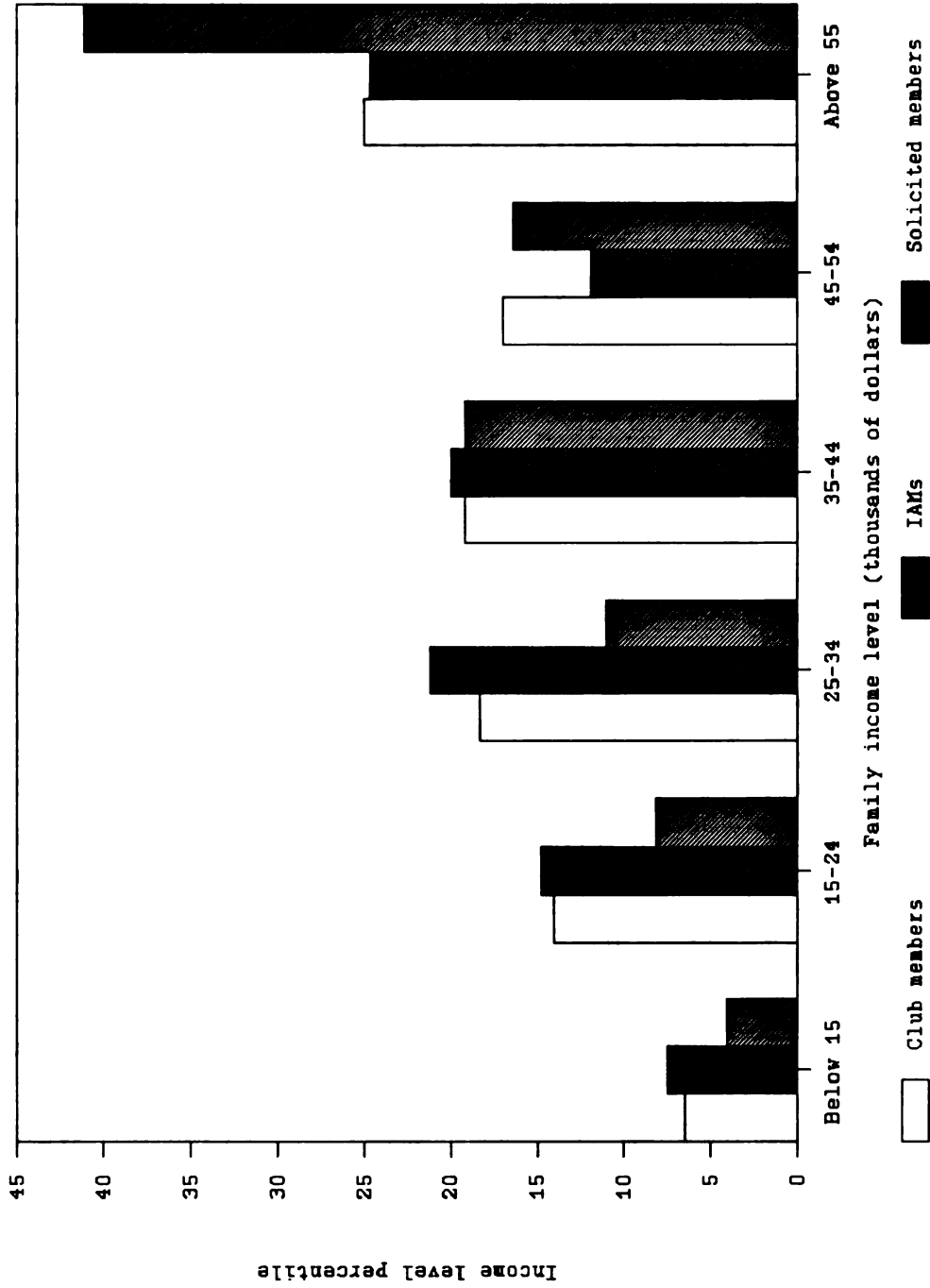


Figure 6. Comparison of income level for MUCC membership groups.

IAMs (23.2%) showed a higher proportion of retirees than club members, (17.7%), ($X^2= 4.92$, $df=1$, $P=0.03$). Solicited members (9.3%) were less likely to hold factory positions than IAMs ($X^2=7.51$, $df=1$, $P=0.006$) but were three times as likely to be involved in educational ($X^2=11.21$, $df=1$, $P=0.001$) or medical ($X^2=13.04$, $df=1$, $P<0.001$) occupations.

Table 4. Percent distribution of occupations among MUCC member groups.*

Occupation	All Members (n=1113)	Club Members (n=504)	IAMs (n=534)	Solicited (n=75)
Farm related	1.8	2.8	1.3	-
Educational ^{bc}	4.2	4.4	4.1	13.3
Managerial	16.5	16.3	16.7	12.0
Factory ^c	14.9	14.1	15.4	8.0
Sales ^a	6.5	6.3	6.6	6.7
Medical ^{bc}	2.1	3.0	1.7	9.3
Construction	6.9	7.7	6.6	2.7
Student	0.9	0.4	1.1	1.3
Retired ^{ac}	21.4	17.7	23.2	9.3
Other	24.7	27.4	23.4	37.4

^aThe occupation variable percentage differs significantly ($P<0.05$) between club members and IAMs.

^bThe occupation variable percentage differs significantly ($P<0.05$) between club and solicited members.

^cThe occupation variable percentage differs significantly ($P<0.05$) between IAMs and solicited members.

*Results of statistical significance tests are reported in Appendix E.

Family Orientation

A majority of MUCC members (84.5%) indicated they were currently married (Table 5). IAMs had the highest rate of nonmarried members (16.6%), with Solicited members reporting the fewest (10.7%). Both club members and IAMs had similar

percentages of working spouses ($X^2=0.97$, $df=1$, $P=0.33$).

No difference was found in the number of children per family reported by the members. Most members indicated

Table 5. Percent distribution of responses to family orientation variables among MUCC member groups.

Variable and responses	All Members (n=1111)	Club Members (n=505)	IAMs (n=531)	Solicited (n=75)
Married	84.5	86.7	83.4	89.3
Spouses working^{bc}	46.6	48.9	45.5	65.3
Number of children				
0	15.1	15.1	15.0	10.7
1-2	42.7	42.4	42.9	52.0
3-5	35.5	36.3	35.2	32.0
>5	6.5	6.0	6.7	5.3
Youngest Child is less than nine years old.^{bc}	25.8	22.6	27.4	37.7
Children are very active.	49.9	50.2	49.7	41.2
Children require most of my time.	19.8	18.8	20.2	25.8

^aPercentages for family variable differs significantly between Club members and IAMs, $P<0.05$.

^bPercentages for family variable differs significantly between Club and solicited members, $P<0.05$.

^cPercentages for family variable differs significantly between IAMs and solicited members, $P<0.05$.

family sizes of 1-2. Solicited members reported the greatest number of families with children less than nine years of age (37.7) when compared to club members ($X^2=11.13$,

df=1, $P < 0.001$) and IAMs ($X^2 = 9.79$, df=1, $P = 0.002$). Club members had the oldest families with only 22.9 percent indicating children with less than nine years old. One notable difference was in the response of IAMs to these questions. This group had the largest number of families with none of the children less than 18 (51.1) but also reported a high percentage of families with children less than nine (27.4).

No significant difference was found in children's activity levels nor in the time demand children's activities placed on their parents (Table 5).

Political Activity

The percentage of all MUCC members (n=1150) registered to vote (92%) exceeded the state voter registration (83%).³ Eighty-seven percent of the members reported voting in the last Presidential election. Reported voting activity for all members declined from national to local events with 83.1% of the members indicating they always vote in national elections, 74.2% voting in the state elections and 53.3% always voting in local elections (Table 6).

IAMs (n=546) were less likely to be registered voters (91.7%) in comparison to club (94.8%, respondents=523) and

³The percentage was calculated by using the number of Michigan citizens of voting age (6,740,000) and number of registered voters (5,593,000). These numbers were obtained through personal communication with the Michigan Secretary of State office, August 1988.

Table 6. Comparison of membership groups percentage reporting frequent voting in national, state and local elections.

Type of Election	All Members (n=1147)	Club Members (n=525)	IAM (n=541)	Solicited Members (n=81)
National	88.7	91.9	87.2	93.8
State	87.4	89.5	86.3	91.3
Local	81.5	83.3	80.6	82.7
Voted in 1984	86.9	89.7	85.5	91.3

solicited members (97.5%, respondents=81). Club members were more likely to vote in national elections than either IAMs or solicited members ($X^2=6.48$, $df=2$, $P=0.04$). No significant differences were found between the membership groups in percentage of respondents indicating they voted in the 1984 national election. All groups showed a similar decrease in voting activity from national to state to local elections. The club members also reported more activity writing legislators on political issues ($X^2=5.23$, $df=2$, $P=0.07$) (Table 7).

A majority of MUCC members (62.7%) reflect some feeling of political helplessness by agreeing that legislators are more likely to listen to industry concerns than to constituents on environmental issues (Table 8). Less than 15% of each group disagreed with the statement. Over two-thirds of the Solicited members (70.1%) felt constituents had less impact on legislative decisions.

Table 7. Frequency of contact by MUCC member groups with state and national legislators.

Membership Group	Percentage				
	Never Write 1	2	Sometimes Write 3	4	Often Write 5
All members (n=1044)	44.7	22.4	28.2	3.1	1.5
Club members (n=503)	38.6	25.0	28.8	5.2	2.4
IAMs (all) (n=541)	47.7	21.2	27.9	2.1	1.1
Solicited members (n=77)	45.5	27.3	20.8	2.6	3.9

Chi Square test results: $X^2=5.23$, $df=2$, $P=0.07$

Table 8. Percent distribution of respondents believing that legislators are more likely to listen to industry

Membership group	Strongly Disagree				Strongly Agree
	1	2	3	4	
All members (n=1133)	3.1	8.0	26.1	35.8	26.9
Club (n=513)	3.1	9.6	28.5	34.9	24.0
IAMs (n=540)	3.1	7.2	25.0	36.3	28.3
Solicited (n=80)	0.0	6.3	23.8	46.3	23.8

When asked to indicate reasons for joining MUCC, Club Members were more likely to indicate "having a voice in conservation politics" as a motivating factor ($X^2=32.86$, $df=2$, $P<0.001$) (Table 9). Receiving the magazine was the

most important reason indicated by IAMs ($X^2=105.99$, $df=2$, $P<0.001$). Solicited members rated support of MUCC programs as a more important reason than either the magazine subscription or having a political voice.

Table 9. Reasons membership groups indicating as important reason for membership in MUCC.

Membership Reason	Percentage			
	All Members (n=1045)	Club Members (n=504)	IAMs (n=534)	Solicited Members (n=77)
To receive MOOD magazine	70.7	52.6	79.2	41.6
To support MUCC activities and programs	48.4	44.8	50.2	54.5
To have a voice in conservation politics	45.0	55.9	39.6	37.3

Recreation Patterns

The membership of MUCC was found to be extremely active in outdoor recreation activities (Table 10). Fishing and hunting were the most popular activities with 92.5% and 89.3% of the members participating at least once in 1987. Forty-five percent of the MUCC members took over ten fishing trips in 1987 and 40% took at least ten hunting trips.

Table 10. Percentage of MUCC member groups participating in various recreation activities at least once during 1987.*

Recreation Activity	All Members	Club Members	IAMs	Solicited Members
Photography trip ^a	47.6 (n=776)**	42.2 (360)	50.3 (360)	42.9 (56)
Fishing trip ^{bc}	92.5 (1030)	90.1 (463)	93.6 (500)	36.7 (67)
Camping trip ^{bc}	73.4 (831)	69.9 (382)	73.6 (386)	55.6 (63)
Trapping trip ^{abc}	9.2 (702)	12.3 (334)	7.6 (315)	- (53)
Hiking trip	62.9 (792)	59.3 (359)	64.7 (371)	68.7 (62)
Hunting trip ^{bc}	89.3 (990)	90.2 (459)	88.9 (467)	39.1 (64)
Boating trip ^{bc}	83.4 (880)	79.5 (406)	84.4 (411)	61.9 (63)
Watching Wildlife ^{bc}	82.8 (853)	79.5 (389)	83.9 (403)	62.3 (61)
ORV trip ^{bc}	49.9 (808)	41.4 (360)	53.9 (386)	25.8 (62)
Attended sports show seminar, etc. ^{bc}	98.3 (1087)	98.4 (495)	98.3 (518)	71.6 (74)

^aPercentages for recreation variable differs significantly between Club members and IAMs, $P < 0.05$.

^bPercentages for recreation variable differs significantly between Club members and solicited members, $P < 0.05$.

^cPercentages for recreation variable differs significantly between IAMs and solicited members, $P < 0.05$.

*Significance test results between memberships are reported in Appendix E.

**All sample sizes reported represent total respondents.

MUCC members also participated in a number of nonconsumptive outdoor activities with over one-third of the membership indicating they took more than ten trips to watch wildlife and 62% indicating they took at least one hiking trip. This interest in nonconsumptive wildlife participation was evident across memberships groups. Thirty-two percent of the club members and 35.5% of the IAMs indicated taking more than 10 trips to view wildlife during 1987.

A further indication of MUCC members interest in outdoor recreation was their high participation in vicarious outdoor experiences. Ninety-eight percent of the members reported attending a sports show at least once during the previous year.

A comparison of recreation activity level revealed few differences between club and IAM members. Club members were just as likely to hunt, fish, hike and watch wildlife as their IAM counterparts (Table 10). A significantly higher percentage of IAMs had taken at least one camping or photography trip or participated in off-road recreation.

Solicited members were less likely to participate in most recreation activities such as hunting, fishing and trapping. They were also less likely to camp, boat or attend outdoor shows. Less than 25% of this group took more than ten trips to view wildlife.

An examination of recreation partner preferences

revealed some interesting trends. Overall, MUCC members preferred to be accompanied by friends when hunting (42.2%), fishing (43.5%) or boating (40.8%), with immediate family being the next most popular category. Immediate family members were the most popular choice as camping or hiking partners by MUCC members (Tables 11-15). These preferences were consistent between membership groups.

Memberships

Club members on average reported about ten and one-half years of continuous membership with MUCC. IAMs averaged about seven years of membership. Data on solicited members was not calculated since the canvassing program was less than two years old.

Table 11. MUCC membership group preferences for partners when hunting (Percent).

Partner Preference	All Members (n=1271)	Club Members (n=477)	IAMs (n=426)	Solicited Members (n=27)
Alone	10.1	11.7	9.4	7.4
Friends	47.9	47.5	48.1	51.9
Close Relatives	19.0	16.5	20.2	22.2
Immediate Family	22.8	24.3	22.1	18.5

Table 12. MUCC membership group preferences for partners when fishing (Percent).

Partner Preference	All Members (n=1344)	Club Members (n=462)	IAMs (n=463)	Solicited Members (n=43)
Alone	6.7	5.3	7.3	4.7
Friends	46.2	49.5	44.7	48.8
Close Relatives	16.4	16.7	16.2	11.6
Immediate Family	30.5	28.2	31.5	34.9

Table 13. MUCC membership group preferences for partners when camping (Percent).

Partner Preference	All Members (n=975)	Club Members (n=425)	IAMs (n=329)	Solicited Members (n=48)
Alone	1.4	1.3	1.5	2.1
Friends	32.1	33.1	31.6	25.0
Close Relatives	13.4	11.0	14.6	18.8
Immediate Family	52.8	54.6	52.0	54.2

Table 14. MUCC membership group preferences for partners when boating (Percent).

Partner Preference	All Members (n=1159)	Club Members (n=439)	IAMs (n=395)	Solicited Members (n=47)
Alone	1.6	2.2	1.3	2.1
Friends	47.5	51.5	45.7	38.3
Close Relatives	13.7	13.9	13.6	25.5
Immediate Family	37.0	32.1	39.2	34.0

Table 15. MUCC membership group preferences for partners when hiking (Percent).

Partner Preference	All Members (n=810)	Club Members (n=416)	IAMs (n=280)	Solicited Members (n=47)
Alone	20.0	21.6	19.3	8.5
Friends	24.9	26.4	24.3	29.8
Close Relatives	8.1	6.4	8.9	10.6
Immediate Family	46.3	45.2	46.8	51.1

MUCC members (n=1117) averaged memberships in two or three conservation organization membership in addition to their MUCC membership. The most common was membership in the National Rifle Association (44%). Other significant cross memberships included National Wildlife Federation (16.8%) and Ducks Unlimited (11.6%) (Figure 7).

The cross membership possibilities in the survey represented two primary types. Organizations supporting consumptive types of recreation use included National Wildlife Federation (NWF), National Rifle Association (NRA), Ducks Unlimited (DU), Trout Unlimited (TU), and Safari Club International (SCI). The other organizations National Audubon Society (NAS), Greenpeace (GRPC), Sierra Club (SIER) and Michigan Environmental Council (MEC) represent a more neutral or nonconsumptive position on recreation use.

Two of the consumptive organizations NRA, and DU showed a declining percentage of cross membership from club members (n=510) to IAMs (n=529) to solicited members (n=78) (Figure 8)⁴. Solicited members were less likely to be members of NRA than either club members ($X^2=34.17$, $df=1$, $P<0.001$) or IAMs ($X^2=16.29$, $df=1$, $P<0.001$).

Solicited had the highest percentage of cross membership in the National Audubon Society and were three times as likely to join NAS as club members ($X^2=6.56$, $df=1$,

⁴All significance test results between membership groups are reported in Appendix E.

P=0.01) (Figure 9). The differences were more marked when comparing membership in Greenpeace between solicited members and club members ($X^2=23.94$, $df=1$ $P<0.001$) and IAMs ($X^2=25.05$, $df=1$, $P<0.001$). Only about 1% of either club or IAM members held cross membership in Greenpeace. One of every ten solicited members indicated membership in Greenpeace.

The sample size of cross memberships in MEC, TU and SCI were too small to determine significance. No preference could be determined across membership groups for membership in the NWF. About fifteen percent of all groups had cross membership with NWF.

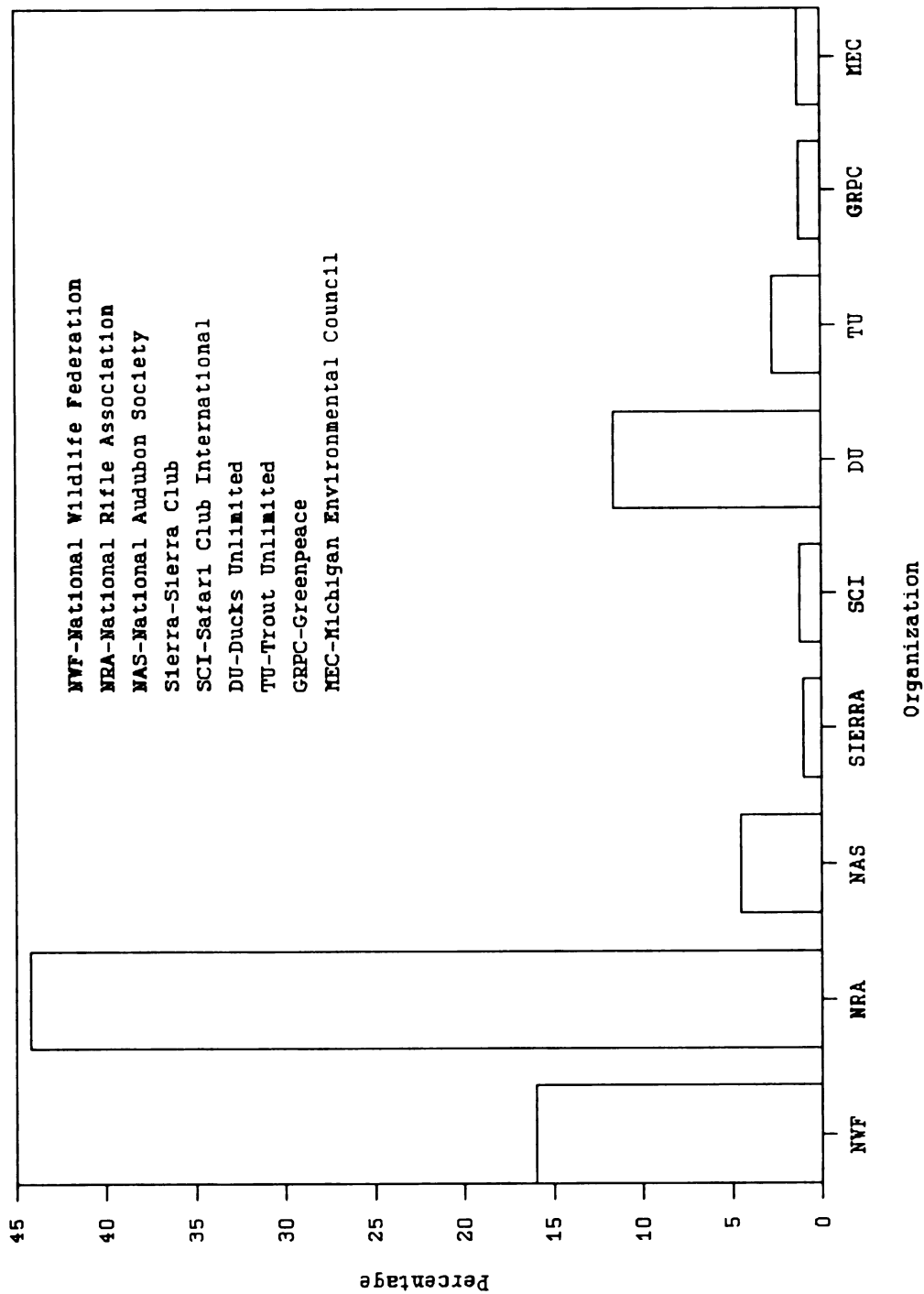


Figure 7. Percentage of NUCC members holding memberships in selected organizations

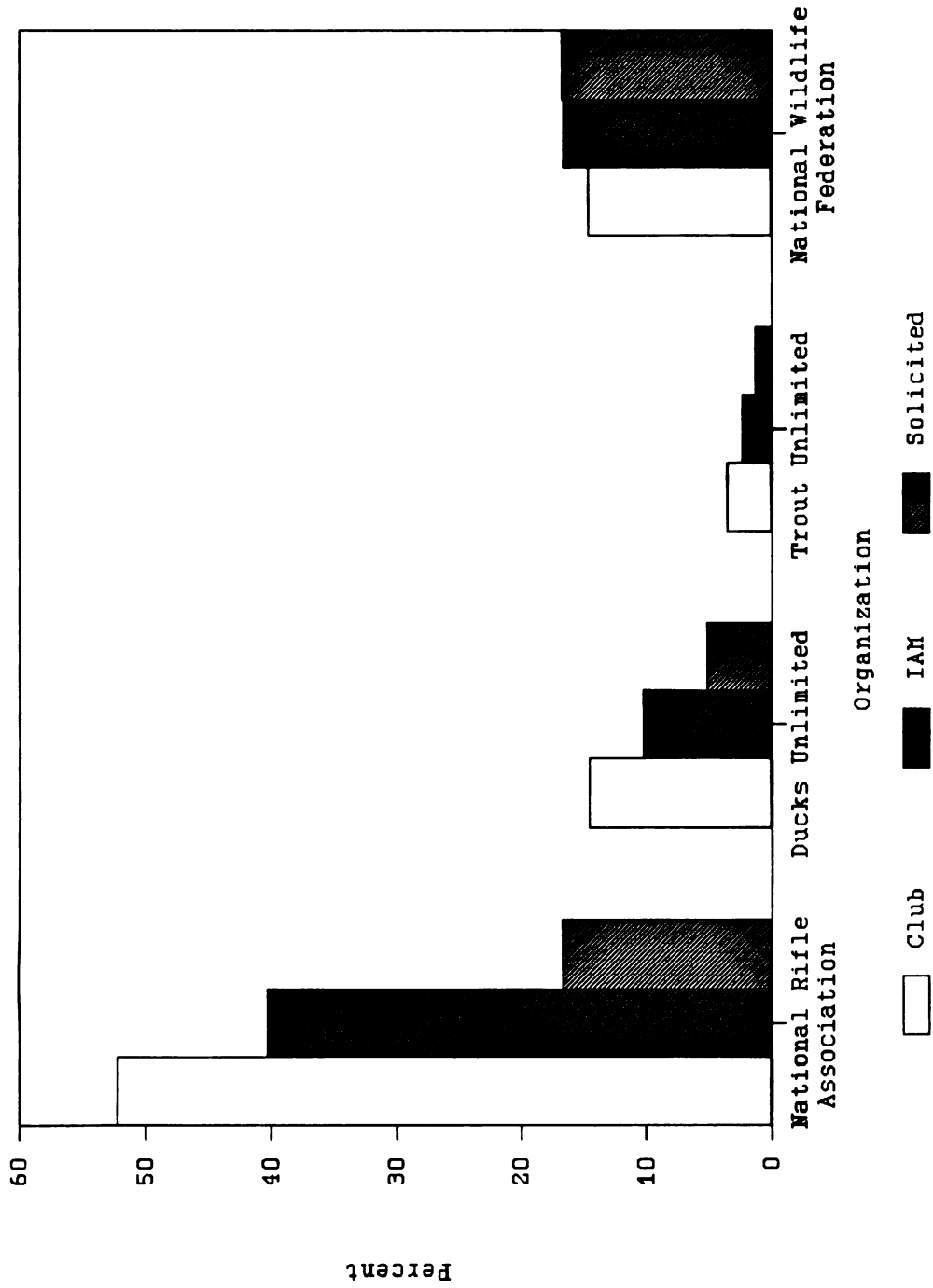


Figure 8. Percent of MUCC member groups having memberships in organizations actively supporting consumptive recreation.

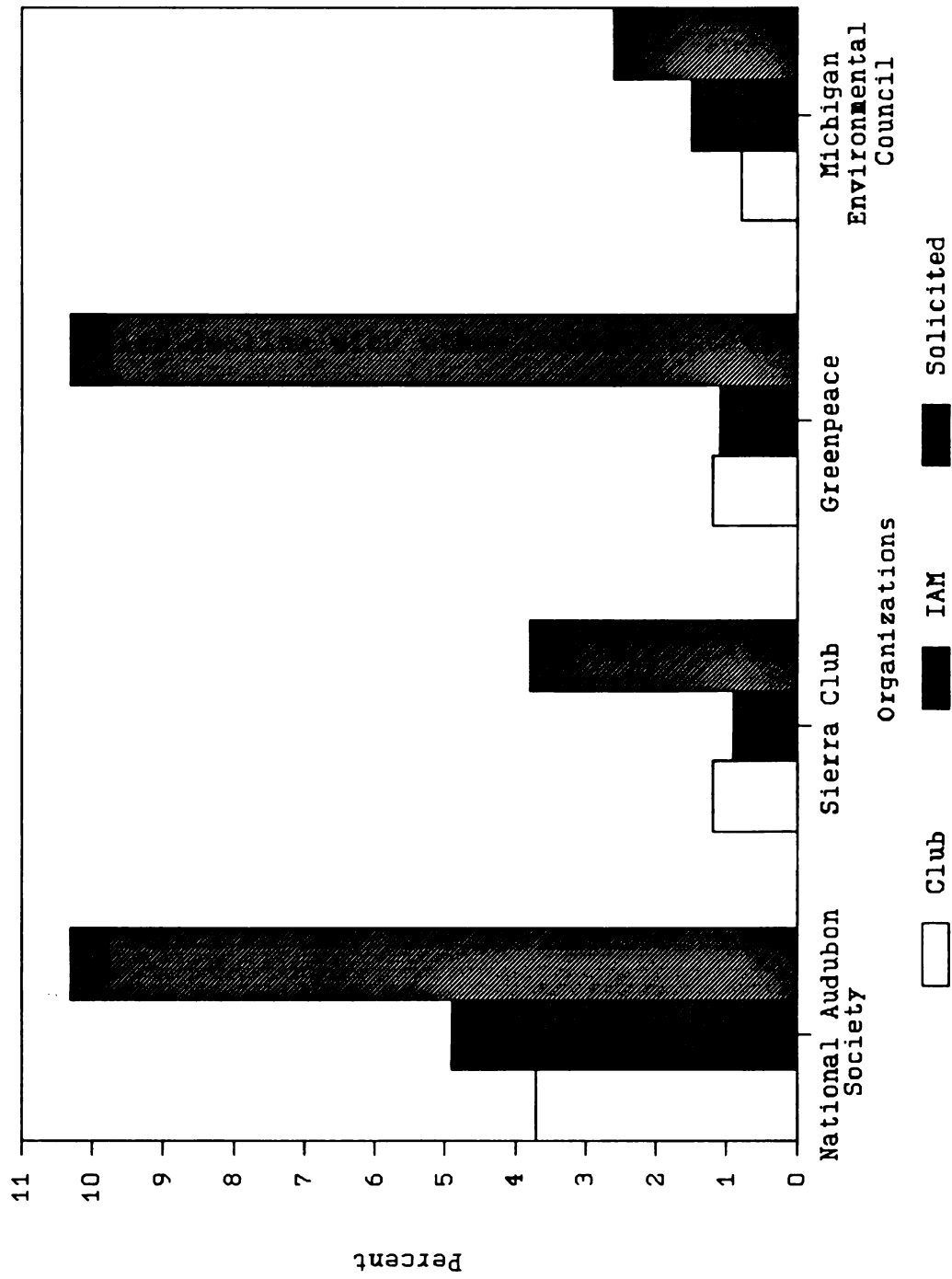


Figure 9. Percentage of MUCC member groups holding memberships in selected organizations not actively supporting consumptive recreation.

Magazine Readership

The Michigan-Out-of-Doors Magazine is a monthly periodical containing articles pertaining to hunting, fishing, nature and environmental issues. A review of the issues published between January 1982 and December 1987 was completed. During this period the magazine contained 461 major articles. Sixty-five percent of the articles were related to hunting and fishing topics. These included how-to articles as well as hunting stories. General outdoor articles dealing with other outdoor activities, features on wildlife species, or people profiles constituted 28% of the articles during this same period. Articles on specific environmental topics were eight percent of the articles counted during this period.

A dominant portion (70.7%) of the survey respondents indicated receiving Michigan-Out-Of-Doors magazine as important to their membership. With few exceptions IAMs were more likely to read the major magazine sections each month (Table 16). Several of the responses received from IAMs indicated they read the magazine cover to cover. The magazine is an area where IAMs shared an equal interest in politics with club members. No significant differences existed between the readership of the Legislative Report section.

Table 16. Percentage of membership groups reading selected magazine sections at high levels.*,**

Magazine Section	All Members (n=1126)	Club Members (n=512)	IAMs (n=538)	Solicited Members (n=76)
Hunting and fishing articles ^{abc}	79.4	72.3	82.9	38.2
General outdoor articles ^{abc}	73.2	62.5	78.3	52.0
Special cons. features ^{abc}	65.7	56.7	69.9	42.6
Editorials ^{abc}	52.9	45.3	56.5	36.8
Regional Report ^{abc}	62.9	51.9	68.0	37.3
Letters to the Editor ^{bc}	54.1	51.5	55.3	35.5
Legislative Report ^{bc}	49.6	47.3	50.7	30.3
Conservation Update ^{abc}	57.3	51.5	60.1	40.0
Classified Ads ^{abc}	36.7	32.2	38.9	21.3
Page Advertising ^{abc}	30.1	27.5	31.4	16.0

^aPercentages for readership variable differs significantly between Club members and IAMs, $P < 0.05$.

^bPercentages for readership variable differs significantly between Club members and solicited members, $P < 0.05$.

^cPercentages for readership variable differs significantly between IAMs and solicited members, $P < 0.05$.

*A high level of readership was acknowledged if the respondent indicated either a reading level score of four or five to the section.

**Significance tests results between membership groups are reported in Appendix E.

Solicited members had the lowest magazine readership.

The section most likely to be read by solicited members were

articles dealing with general outdoor topics. Less than 40 percent read the hunting and fishing articles with any consistency. Even fewer solicited members read the Legislative report (30.3%) regularly.

Attitudes towards MUCC Programs

The areas of primary interest to MUCC members is in the area of water quality. All three membership groups felt MUCC should be doing more to protect Great Lakes Water Quality and Ground Water Quality (Table 17).

Solicited members indicated a significantly higher interest in toxic waste cleanup ($X^2=9.24$ $df=2$, $P=0.01$). Solid Waste Management and Conservation Education also received high interest from this group. In contrast, less than half (48.7%) of the solicited member felt MUCC should be doing more to protect hunters and anglers rights. This was significantly lower than club members and IAMs ($X^2=18.09$, $df=2$, $P<0.001$). Both club members (80%) and IAMs (78.8%) had significantly higher percentages of members requesting more involvement.

Many of the members from all three membership groups felt MUCC was currently doing enough, lobbying on gun control.

Table 17. Percentage of membership groups who feel MUCC should be doing more on selected conservation issues.

Conservation Issue	Club Members (n=504)	IAMs (n=522)	Solicited Members (n=76)	Significance*	
				X²	P
Promoting conservation education	68.2	66.2	75.0	3.33	0.19
Promoting solid waste management	63.3	67.1	78.9	0.57	0.75
Lobbying on gun control legislation	52.6	48.8	56.7	4.47	0.11
Promoting outdoor recreation	64.0	59.8	59.8	0.87	0.65
Protecting Great Lakes water quality	81.3	89.8	90.8	5.52	0.06
Protecting ground water quality	80.6	83.5	88.2	5.40	0.07
Protecting air quality	70.8	75.7	85.5	5.48	0.07
Promoting toxic waste clean up	73.0	77.6	84.0	9.24	0.01
Protecting angler and hunter rights	80.0	78.7	48.7	18.09	<0.001

*Degrees of freedom for all significance tests equals two.

Resource Attitude Domains

The measurement of Kellert's attitude domain showed some significant differences between membership groups (Table 18). Utilitarian attitudes measured by the survey ranked significantly lower for solicited members when compared to either club members ($X^2=32.70$, $df=1$, $P<0.001$ or

IAMs ($X^2=32.82$, $df=1$, $P<0.001$). Solicited member's utilitarian scores ranked the lowest of the four attitudes measured. Humanistic attitudes showed the only significant difference between club members and IAMs.

Moralistic attitude scores ranked the highest for solicited members. These scores were significantly higher than those for either club members or IAMs. Solicited members also had significantly higher scores for Ecologistic attitudes.

Table 18. Mean attitude value scores for MUCC membership groups.*

Kellert Value	Club Members (n=425)		IAMs (n=442)		Solicited Members (n=76)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Utilitarian ^{bc}	12.23	6.58	12.29	6.73	7.79	6.15
Moralistic ^{bc}	10.24	5.45	10.48	5.67	12.42	5.55
Ecologistic ^{bc}	12.45	5.50	12.05	5.35	14.92	5.28
Humanistic ^a	9.30	5.42	10.12	5.33	9.30	4.58

^aPercentages for attitude variable differs significantly between Club members and IAMs, $P<0.05$.

^bPercentages for attitude variable differs significantly between Club members and solicited members, $P<0.05$.

^cPercentages for attitude variable differs significantly between IAMs and solicited members, $P<0.05$.

*A listing of all significance test scores are reported in Appendix E.

The small number of females sampled, prevented the use of any attitude comparisons between sexes in either the club members or IAMs. An examination of solicited members showed males scored significantly higher in utilitarian attitudes (Table 19) ($X^2=5.45$, $df=1$, $P=0.019$). No difference was found in either moralistic, ecologicistic, or humanistic attitudes.

Table 19. Comparison of attitude value scores between male and female solicited members.

Kellert Value	Males n=40		Females n=33		Significance		
	Mean	Std. Dev.	Mean	Std. Dev.	X^2	df	P
Utilitarian	9.17	6.85	5.88	4.72	5.45	1	.019
Moralistic	12.10	5.91	13.09	5.17	0.39	1	.533
Ecologicistic	14.75	5.46	15.52	4.95	0.34	1	.562
Humanistic	8.57	4.30	10.36	4.94	0.10	1	.102

IAMs Interested in Joining clubs and IAMs Not Interested

Age

The primary age differences between interested (n=221) and noninterested (n=352) IAMs was found at the younger and older age categories (Figure 10). No significant differences existed between these two groups in the 35-49 year age categories ($X^2=1.77$, $df=1$, $P=0.18$). A higher percentage of IAMs interested in clubs were found in the

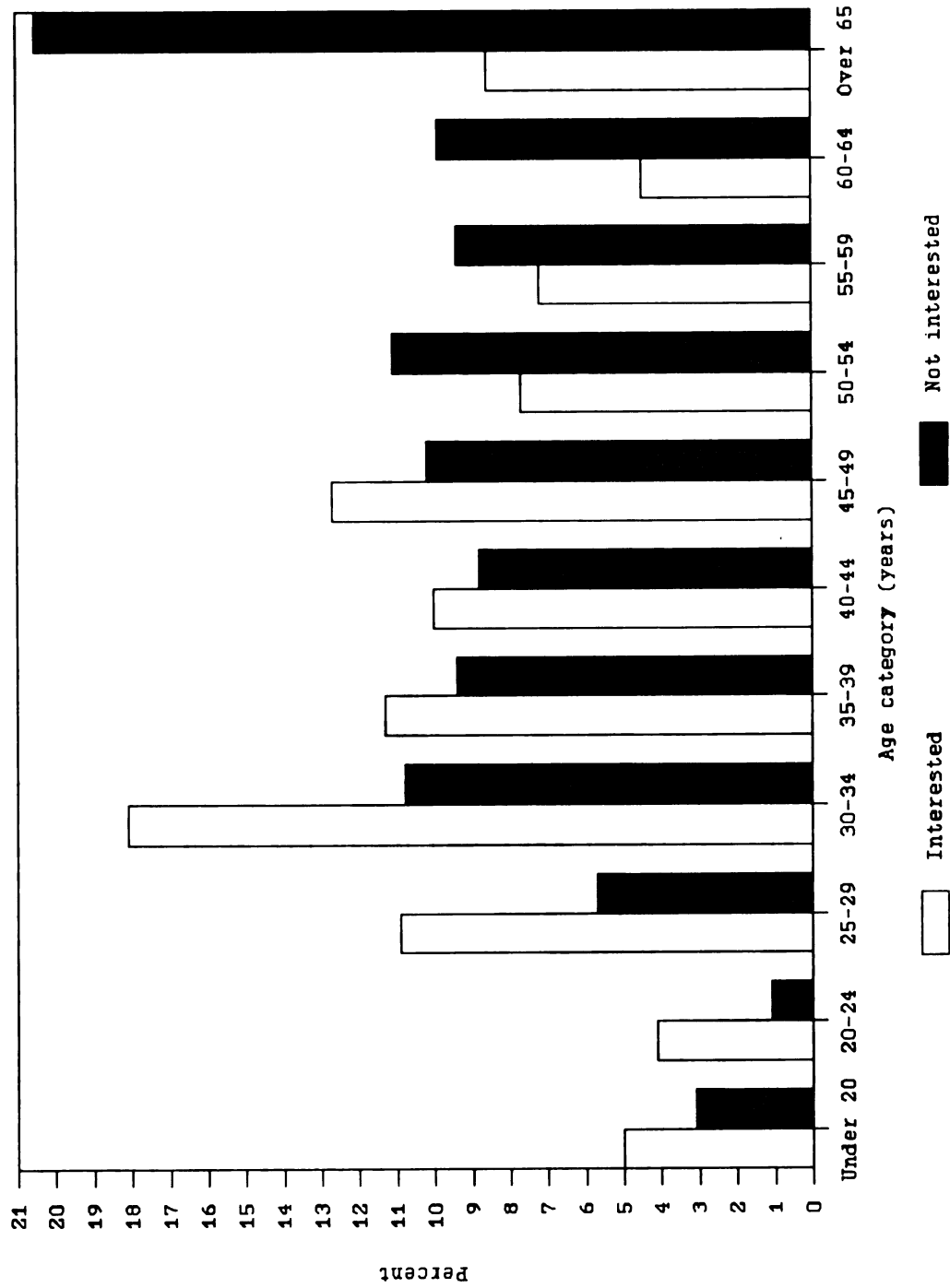


Figure 10. Age distribution of IANs interested and those not interested in joining clubs

20-35 year age group ($\chi^2=23.30$, $df=1$, $P<0.001$). IAMs not interested had a higher percentage of members over 55 ($\chi^2=15.46$, $df=1$, $P<0.001$). One of every five IAMs not interested in membership was over 65 years old. The mean age for IAMs interested and those not interested was 42.7 and 51.4 respectively.

Political Activity

No significant difference occurred between interested and noninterested IAMs in their levels of political activity. IAMs interested (91.7%, respondents=218) in joining MUCC clubs and those not interested (91.9%, respondents=347) indicated a similar level of registered voters. Neither was any difference found in the amount of contact with legislators (Table 20) ($\chi^2=0.90$, $df=1$, $P=0.34$).

Comparisons of these two groups to club members revealed some differences. IAMs not interested were less likely to have voted in the 1984 presidential election ($\chi^2=4.20$, $df=1$, $P=0.04$) and to contact their legislators ($\chi^2=8.97$, $df=1$, $P<0.01$) than club members. Interested IAMs were more likely to indicate some feeling of political helplessness than club members ($\chi^2=11.38$, $df=1$, $P<0.001$).

Table 20. Comparison of political activity between interested and noninterested IAMs and club members.*

Political Activity	Percentage		
	IAMs Interested (n=210)	IAMs not Interested (n=331)	Club Members (n=525)
Registered Voter	91.7	91.9	94.8
Voted in 1984	85.9	84.8	89.7
Have some feeling of political helplessness	72.8	59.2	58.9
Contact legislators frequently	4.3	2.4	7.6

*Significance test results are reported in Appendix E.

Recreation Patterns

Interested IAMs were more recreationally oriented than any group of MUCC members (Table 21). Interested IAMs spent a great deal more time hunting, fishing, boating or camping than noninterested IAMs. They were also more likely than club members to spend recreation time in several of the outdoor activities. Nearly 94% percent of the interested IAMs indicated taking at least one hunting trip in 1987.

Recreation participation by interested IAMs included a considerable time in nonhunting activities as well. During 1987, 87% had taken at least one trip to watch wildlife and 70% indicated taking at least one hiking trip.

Recreation partners were similar to other groups with friends being more likely to be partners in consumptive recreation pursuits and family being more likely as partners

Table 21. Percentage of interested, non interested IAMs and club members participating in various recreation activities at least once during 1987.*

	<u>IAMs Interested</u>	<u>IAMs Not Interested</u>	<u>Club Members</u>
Photography trip ^{ab}	58.0 (n=157) **	44.3 (210)	42.2
Fishing trip ^{ab}	94.7 (206)	92.9 (309)	90.1
Camping trip ^{ab}	78.9 (171)	68.2 (223)	69.9
Trapping trip	9.1 (143)	6.1 (179)	12.3
Hiking trip ^b	69.1 (165)	61.1 (216)	59.3
Hunting trip ^a	93.9 (197)	85.2 (284)	90.2
Boating trip ^{ab}	88.8 (179)	81.3 (241)	79.5
Watching Wildlife ^b	87.4 (174)	81.7 (240)	79.5
ORV trip ^b	56.1 (173)	53.3 (225)	41.4
Attended sports show seminar, etc. ^a	99.1 (212)	97.5 (323)	98.4

^aPercentages for recreation variable differs significantly between Interested and noninterested IAMs $P < 0.05$.

^bPercentages for recreation variable differs significantly between Interested IAMs and Club members, $P < 0.05$.

*All significance test results between memberships are reported in Appendix E.

**All sample sizes reported represent total respondents.

in boating, camping and hiking activities. Interested IAMs were more likely to engage in fishing recreation with immediate family than club members.

Attitudes towards MUCC programs

When asked to compare their attitudes towards MUCC with those of close acquaintances, significant differences were found between interested and noninterested IAMs (Table 22).

Friends and relatives of interested IAMs were more likely to share similar attitudes towards MUCC than the noninterested group. No difference was found in spouses attitudes towards MUCC.

Interested IAMs consistently rated MUCC performance lower on many of the issue areas than did interested IAMs. Eighty-eight percent of interested IAM felt MUCC should be doing more in protecting hunter and angler rights. Significant differences also occurred among water quality issues and outdoor recreation (Table 23).

Table 22. Percent of IAMs interested in joining clubs and IAMs not interested who believe acquaintance attitudes towards MUCC are similar to their own.

Acquaintance	IAMs Interested (n=214)	IAMs Not Interested (n=322)	Significance		
			X ²	df	P
Spouse	54.7	57.4	0.66	1	0.42
Close relatives	62.7	52.3	6.12	1	0.01
Friends	67.2	54.7	10.02	1	<0.01

Table 23. Percentage of IAMs interested in joining a club and IAMs not interested who feel MUCC should be doing more in selected conservation issues.

Conservation Issue	IAMs interested (n=213)	IAMs not interested (n=322)	Significance		
			χ^2	df	P
Promoting conservation education	72.4	61.2	1.33	1	0.25
Promoting solid waste management	69.4	65.6	0.23	1	0.63
Lobbying on gun control legislation	53.1	37.8	0.22	1	0.64
Promoting outdoor recreation	68.4	54.2	8.41	1	<0.01
Protecting Great Lakes water quality	91.1	80.4	6.15	1	0.01
Protecting ground water quality	90.1	70.3	5.31	1	0.02
Protecting air quality	82.6	81.2	3.43	1	0.06
Promoting toxic waste clean up	81.7	74.7	1.82	1	0.18
Protecting angler and hunter rights	88.2	73.2	11.55	1	<0.01

Predicted future involvement

The measurement of past and expected future environmental involvement was compared with current interest. Over the past ten years 37 percent of interested IAMs indicated increased environmental activity. Two thirds

of the interested IAMs were also predicted an increase in their involvement during the next ten years (Table 24). Nearly seventy percent of the IAMs not interested in joining a club expected their involvement to either remain the same or decrease.

Table 24. Rating of past and future environmental activity compared to present level of activity for IAMs interested in joining a MUCC affiliate and those not interested.

Membership Group	More	Same	Less
IAMs interested (n=193)			
past ten years	37.3	45.6	17.1
next ten years	65.8	32.1	2.1
IAMs not interested (n=306)			
past ten years	20.9	63.4	15.7
next ten years	31.4	58.7	9.9

Comparison of Activity Interest for Club members and IAMs

An assessment of club program interests of both club members and interested IAMs revealed some basic similarities between the two groups (Table 25). Those items rating the highest among club members included being with people of the same interest (58.6%), shooting ranges (52%), and youth programs (36.8%). Interested IAMs rated the same three items as important (76.1%, 70.7% and 56.9% of the time

respectively). Clubhouse facilities were rated as less important for IAMs than club members. Still, about one-

Table 25. Comparison of programs and activities important to MUCC club members and IAMs interested in joining a club.

Activity or Program	Percentage		Significance X ² df P		
	Club Members (n=485)	IAMs Interested (n=197)			
Clubhouse facilities	34.4	36.7	6.30	1	0.01
Shooting ranges (trap, skeet, archery)	52.2	70.7	22.36	1	<0.01
Competitive shooting leagues	28.0	26.7	4.32	1	0.04
Club fishing or hunting opportunities	26.0	59.6	98.26	1	<0.01
Community projects	26.8	41.7	39.17	1	<0.01
Club family activities	30.5	51.7	35.21	1	<0.01
Youth activities	36.8	56.9	30.50	1	<0.01
Regular programs	25.5	52.8	77.48	1	<0.01
People with similar interests	58.6	76.1	25.35	1	<0.01

third of both groups indicated that clubhouse facilities were important in making a decision about club membership.

The most significant results were differences between the percentage of IAMs and club members indicating the importance of individual programs or facilities. IAMs

consistently rated all programs and facility options as more important than did club members. Nearly 60% of the IAMs indicated that club fishing and hunting opportunities would be important in selecting a club while 26% of the club members indicated these activities as important. Other major differences occurred with availability of community projects, family activities and regular programs and speakers.

Membership recruitment

Club members were asked to specify how they first learned of their current club (Table 26). Most club members obtained their initial contact with potential clubs through personal acquaintances (68%). Forty-two percent of the club members learned about their current club through a friend, while eleven percent were introduced through a relative. The lowest number of recruits was obtained through newspapers and special events sponsored by clubs.

Interested IAMs were asked if they were aware of an MUCC affiliated club in their area. Thirty-eight percent (n=132) indicated they did know of an organization. The average distance these clubs were located from the members residence was 11.17 (standard deviation 9.28) miles. When asked how far they would be willing to travel to join a club interested IAMs (n=172) indicated an average driving distance of 18.36 (standard deviation 9.26) miles.

Table 26. Modes by which club members first learned of their current club.

<u>Mode</u>	<u>Percent</u>
Personal Knowledge	18.2
Friend	42.7
Co-worker	5.3
Relative	11.0
Newspaper	1.4
Special Event	4.3

Past members

One hundred and fifty one IAMs indicated they were once members of MUCC clubs. The largest age class (25.2%) included individuals over sixty-five years old (Table 27)

Table 27. Percentage of past club members in various age categories.

<u>Age</u>	<u>Percentage</u>
Below 20	7.9
20-24	0.7
25-29	5.3
30-34	12.6
40-44	6.0
45-49	7.9
50-54	10.6
55-59	8.6
60-65	8.6
Over 65	25.2

IAMs who have been past members of MUCC clubs were more likely to indicate lack of time to use the facilities and involvement in other activities as primary reasons for dropping club membership (Table 28).

Table 28. Percentage of past MUCC club members who indicated selected items as important in dropping their club membership.

Moved from the area	31.3
Could not afford the membership fee	17.6
No longer participate in activities offered	28.3
No time to use club facilities	48.2
Not interested in activities offered	19.6
Involved in other activities	42.6

Older members

Outdoor recreation activities were less likely to include participation by members over fifty years old (Table 29). Older members were less likely to fish, camp, boat or hike than those under fifty. Major differences occurred in when comparing younger and older members taking more than ten fishing and hunting trips. Forty-seven percent of the younger MUCC members indicated taking more than ten fishing

trips compared to 39.9% of older members. A larger percentage (27.6) of younger members also took more than ten hunting trips in comparison to older members (14.4)

Table 29. Comparison of percentage for MUCC members fifty years and older and those under fifty participating in various recreation activities more than ten times during 1987.

Reason for Membership	Members fifty years and older	Members less than fifty	Significance		
			X ²	df	P
Photography trip	4.2 (n=239)*	6.2 (481)	1.78	1	0.18
Fishing trip	39.9 (373)	47.8 (590)	5.65	1	0.02
Camping trip	10.8 (250)	13.5 (518)	10.59	1	<0.01
Trapping trip	3.0 (197)	4.9 (452)	0.00	1	0.99
Hiking trip	13.9 (244)	14.4 (486)	0.18	1	0.67
Hunting trip	14.4 (340)	27.6 (586)	41.09	1	<0.01
Boating trip	31.0 (290)	38.0 (527)	7.91	1	<0.01
Watching Wildlife	30.9 (275)	35.2 (517)	4.81	1	0.03

*All reported sample sizes represent total respondents. reported taking more than ten hunting trips compared to 27.6% of the older members. No difference was found in participation in either hiking or photography trips.

In comparing magazine readership younger members were just as likely to read the hunting and fishing articles as

older members (Table 30). Older members read the general outdoor articles, special feature, editorial and legislative report sections more frequently than younger members.

Table 30. Comparison between MUCC members fifty years old and over and members under fifty reading selected magazine section frequently.

Magazine Section	Members fifty years and older (n=415)	Members less than fifty (n=610)	X ²	df	P
Hunting and fishing articles	58.7	51.5	1.66	1	0.20
General outdoor articles	51.3	40.0	4.81	1	0.03
Special cons. features	51.0	35.3	21.35	1	<0.01
Editorials	43.1	27.2	21.67	1	<0.01
Regional Report	45.3	43.3	0.39	1	0.53
Letters to the Editor	46.7	32.1	18.63	1	<0.01
Legislative Report	38.1	24.1	20.09	1	<0.01

Older members had higher rankings for all three reasons to join MUCC (Table 31). The most significant difference occurred when these two groups were asked how important having a voice in conservation politics was to their membership. Fifty-two percent of the older members indicated this as an important reason compared to 44.5% of the younger members.

Table 31. Comparison of importance placed on selected reasons to join MUCC between members fifty years of age and older and members under fifty.

Reason for Membership	Members Fifty years and older (n=415)	Members Less than Fifty (n=602)	Significance		
			χ^2	df	P
To receive magazine	70.1	63.4	5.06	1	0.02
To support MUCC programs	48.7	46.7	4.96	1	0.03
To have a voice in conservation politics	52.4	44.5	8.25	1	<0.01

DISCUSSION

Response

Reported response rates for mail surveys has ranged from as low as twenty percent to one hundred percent response (Kanuk and Berenson 1975). Surveys eliciting higher returns have incorporated techniques including follow up mailings, university sponsorship of survey, first class or metered postage and stamped return envelopes (Cox et al 1988). Surveys using these methodologies have a predicted average return rate of 65% on most mail surveys (Brown and Wilkins 1978).

Discounting both return of nonresponse cards and contacts made in the nonrespondents telephone survey, the MUCC survey produced a return substantially below the expected return rate (Table 1). This survey of members concerning their organization was expected to bring in an above average response, because of its assumed relevance to members.

One probable cause of the low response rate could have been the structure of the survey. Mail surveys of a general nature have shown a lower response rate (Brown and Wilkins 1978). The MUCC survey contained a number of demographic and general questions. Objections to personal question was

an important factor to all membership groups (Table 2).

Return rates can also be impacted by an individual's interest in the topic (Filion 1975, Suchman 1962). Persons with less interest are more likely not to complete and return surveys. This correlation provides a good basis for explaining the low response of solicited members. Solicited members are urged to join MUCC based on support for an environmental issue (e.g. wetlands, sand dunes). The organization's position on hunting and fishing are seldom noted by the canvasser. Communication with MUCC indicates these members are unfamiliar with MUCC's support of hunting and fishing recreation and often surprised by the knowledge. This membership program has one of the lowest renewal rates of any drive conducted by MUCC.

Explanation of the low response rate for club and magazine subscribers requires a consideration of MUCC membership. Club members join the local affiliates for a variety of reasons indicated (Table 28). The most important services sought are ranges, club facilities, and socialization. A portion of their membership fee to the local club is used to pay for their membership in MUCC. Until recently MUCC's bylaws required all clubs to have 100% of their membership listed as MUCC members. Even though this requirement has been eliminated, many clubs continue to pay dues for all members. As a result most club members have little control in the decision to join. For many,

joining MUCC is not a primary motivating factor in club memberships and their commitment to MUCC is lower.

A similar situation exists for IAMs. Most of the IAMs indicated a high level of importance placed on the magazine (Table 9). They have a desire to read articles about hunting fishing and outdoor recreation. These members are motivated to join by the receipt of an outdoor magazine as a good. MUCC's utility as an activist conservation organization begins at a low level for these magazine readers. There is some indication that the magazine raises the utility of MUCC for some IAMs and will be discussed later.

The nonrespondents follow up study revealed age as one variable which differed significantly from respondents. The nonrespondents tended to be older (Figure 1). These age dependent differences were limited to club and IAM member groups. Solicited nonrespondents and respondents showed no significant age differences. Age has been found to be correlated both positively and negatively depending on the nature of the survey (Filion 1975).

Nonrespondent club members were similar to their respondent counterparts on other variables. Nonrespondents did believe that MUCC should be doing more in promoting conservation education. Available data could not determine whether this attitude was a result of a lower awareness of MUCC programs.

Nonrespondent IAMs differed from respondents in items they indicated as important for membership. Nonrespondents gave less weight to receipt of the magazine and more importance to having a voice in conservation politics. One explanation for this phenomenon may be connected to the higher age of nonrespondents.

Jackson (1980) identified five separate stages through which hunters can pass. Initial stages involve different approaches to the hunting of game animals; shooting, limiting out, trophy, and hunting method. The last stage identified includes a greater appreciation for the entire hunting experience. In this stage, bagging game may be less important than the surroundings in which it is done. Jackson attributes the passage through these stages to increasing age and experiences of the hunter.

Members who are in one of these early stages will have a greater interest in magazines that can increase their success or provide instruction on different hunting options. Feature articles in Michigan Out-of-Doors magazine are primarily devoted to providing information on increasing hunter skill. As skill levels increase interests may shift from the how-to articles to general outdoor articles which may increase their appreciation.

Older members showed more interest in magazine sections concerning current issues and articles on protection of the natural resources. A large percentage of nonrespondents

were represented in older age categories. This shift is consistent with Jackson's theory.

Future research into application of Jackson's theories of hunting stages is warranted. Particular application to this study would include behaviors of members in local outdoors clubs. Does membership encourage hunting stage transition? Do hunters in different stages take identifiable roles in local organizations?

The older age of nonrespondents has two major implications. First it may increase the need to recruit new younger members into both the club and IAM ranks. Without this recruitment MUCC's influence may decline. A beneficial side of this older membership may be a higher than predicted expression of ecologicistic and moralistic values. As in Jackson's final hunter stage these older members have learned to have a concern for the total experience.

Membership profiles

As a group MUCC reflects the profile of many other volunteer organizations. Members are typically middle aged males who are married, with an above average family income.

Further analysis of the survey data reveals four distinctly different groups of members. MUCC members can be classified as club members, IAMs interested in joining affiliated clubs, IAMs not interested, and Solicited members.

Club Members

This group of individuals has the longest affiliation with MUCC (ten years). They are a politically active group and will contact legislators on issues important to them.

They are recreationally active, enjoying a variety of outdoor activities both consumptive and nonconsumptive. Hunting and fishing recreation tops the list of preferred outdoor opportunities.

These individuals hold stronger utilitarian and ecologicistic values. These values are also reflected in other organizations in which these individuals hold membership. A large number hold membership with the National Rifle Association, Ducks Unlimited and the National Wildlife Federation which are all utilitarian organizations with an ecological interest.

Most club members are married with spouses working either in a full or part time capacity.

The opportunity to associate with others having similar interest is a strong motivating factor in club memberships. Membership also provides opportunities to improve outdoor skills as well as socialization. These members are primarily recruited by close friends or family members.

IAMs Interested in Joining Clubs

This membership group is very similar in many respects to the club members with some important differences.

Although these members do participate in political processes, they indicated less activity than any other group. They report a high level of helplessness towards politics.

This group had high participation in outdoor recreation activities. These members took more trips involving outdoor activities than any of the other groups examined. The magazine is an important part of this activity providing information on skill improvement and other vicarious opportunities.

The high interest in hunting and fishing is reflected in high utilitarian values held by the group. This group also possesses a stronger moralistic attitude component than shown by club members.

This group of IAMs has the highest level of unmarried individuals. The spouses of married members can be expected to be working spouses. The group has the youngest family groups. They are looking for opportunities to recreate as a family unit indicated by their interest in club youth programs, family outings and social opportunities. Other interests also involve skill improvement and opportunities to meet individuals with similar interest. As a group, they predict their involvement in environmental issues to increase during the next ten years.

IAMs Not Interested in Clubs

This older group of members, while still quite active, spent less time in outdoor recreation than the two previous groups. They tend to be more oriented to fishing than hunting. They also expect their environmental involvement to decrease over the next ten years.

They are less inclined to be politically active. A majority are registered to vote, but they report some political helplessness and are likely not to contact legislators about their concerns. They are less likely to have joined MUCC to have a voice in conservation politics.

These magazine subscribers are very similar to club members in their environmental attitudes. They have high utilitarian and high ecologicistic values.

The people in this group associate less with others who have similar feelings. They are interested in the magazine but do not have the overall readership interest of the interested IAMs.

A high percentage of this group is married with over half of the spouses not working. Many have families with the youngest children exceeding 18 years of age.

Solicited Members

Due to the targeting of MUCC's solicitation campaign this group of members differed significantly from the first three groups. This was the only group that had a high

percentage of female members. The solicited members are generally younger, more educated and possess a higher income.

They are less recreationally oriented with much less time spent in consumptive recreation activities. Solicited members also took fewer trips to engage in nonconsumptive recreation activities.

Although most of the members are registered to vote, they were the most likely to have a feeling of helplessness about politics. They are likely to express their conservation politics by joining groups like Greenpeace, Audubon Society, and Sierra Club.

They have strong Ecologicistic and Humanistic values and the lowest Utilitarian values. These low utilitarian values are reflected in the magazine readership. Many have little interest in the magazine and some find the articles to be offensive.

The group has the highest marriage rate and the youngest families. Many are two income families with the spouses working full time.

Joining

Why Join MUCC

The Michigan United Conservation Clubs has the stated purpose of promoting and protecting the states natural resources. As such it would be predictable that the

organization's membership would be composed of members interested in attainment of these purposes. Although a large portion of the members attach importance to supporting MUCC programs and politics, it is not sufficient to explain all members.

Many members indicated benefits derived from memberships in local clubs and the offer of a monthly magazine as an important motivation. These findings are in line with the several accepted joining theories (Olson 1965, Hardin 1982, Collard 1978). These studies indicate a need for the provision of private goods in order to entice memberships.

An example of this type of joiner can be found in the IAMs who indicated the magazine as an important for membership, while indicating little interest in programs or political involvement. Club members whose primary devotion is to the local club and facilities available are another group of members who would fit a benefit driven joining model. If provision of the magazine or club facilities as part of the membership was eliminated these members could be expected to drop membership in MUCC.

Olson's "by-product" model (1965) does not explain the membership decisions of Solicited members showing little interest in the magazine.

Models proposed by Collard (1978) and Hardin (1982) provide a description of alternative motivations to joining

MUCC. Individuals who feel they have little political strength, may join, because they anticipate adequate support from others. This collective support becomes an avenue to overcome individual helplessness. Solicited members demonstrate this style of joining behavior. They receive no analogous private goods as do club members and many show little interest in the magazine. Many of these members are contributing to a collective good with little if any consideration of remuneration. They must further expect enough others to contribute to achieve a mutual collective good. They contribute because they expect to succeed.

Under these models those members who have both an interest in the private goods as well as collective goods can be expected to be the most motivated to remain members of MUCC. Club members who are avid readers of the magazine can be expected to fall into this category.

Hardin's model (1982) allows for both members who are interested only in receiving a magazine or in using club facilities as well as members who have no interest in the magazine or clubs to contribute to achievement of organizational goals.

Mitchell (1979) identifies another private good received from supporting a collective good as self-esteem. Individuals contribute to a "worthy" cause because it provides a sense of satisfaction. These people may recognize the work as morally right. A portion of the

solicited members indicating little interest in the magazine or political involvement would represent this type of member.

Why Join Clubs

Most models dealing with joining decisions identify an irretrievable commitment of individual resources when the decision is made to join an organization. In this survey respondents have elected to forego certain resources to be MUCC members. For some it is simply the commitment of monetary resources to purchase a subscription or support efforts to protect environmental resources. For club members it may also include time to utilize club facilities or to assist in running the club. Several factors may influence a subscriber to forego the extra resources in order to be a club member.

One factor showing importance is the amount of time which a member may have to allocate to club activities or in programs offered. A subscription to a magazine requires only the time to read. Club membership requires a greater degree of time commitment. Time may be spent using club facilities or attending organization meetings. Several past club members identified lack of time to use facilities as important. These members did not believe their monetary commitment was not being met by goods received.

IAMs may also place less value on club activities,

because of family requirements. Competition for time was identified as one of the main reasons past members dropped from clubs.

The monetary cost of joining a club may prevent some MUCC members from joining clubs. The financial burden of club maintenance must be passed on to members through membership fees. For some these costs may drive membership fees higher than local members can pay. This seems to have been a factor in some of the past club members decisions to drop. It may also preclude potential members from joining.

Two factors which do not require any commitment of resources but may prevent club membership, are location and knowledge of clubs. Interested IAMs indicated they would be willing to drive approximately 30 miles to join a local club. If a person interested in joining MUCC can not find an active club or an organization which provides the items desired they may choose to receive only the magazine. The driving distance could further pose a problem for members in rural areas such as southwestern Michigan, northern lower Michigan or in the Upper peninsula. These areas have fewer affiliated clubs.

For other subscribers the need may simply be a lack of knowledge about MUCC and its positions. The magazine is the vehicle by which they can become aware of MUCC and gain an interest in its function. One page highlighting club activities with information on membership into clubs.

If the above factors can be overcome several models describe how the joining process is affected by other behavior. According to both Hardin (1982) and Olson (1965) one of the most obvious reasons for joining clubs would be to maximize the private goods one receives for their membership. This appears to be a major factor when considering the number of club members and IAMs interested in club facilities and socializing with members of similar interest (Table 28).

Socialization into the community is an important motivating factor. Sixty-eight percent of current club members were introduced to clubs by personal contact. Clubs in some communities provide access to meeting new people with similar interests an important aspect to many members (Table 25) or may be viewed as part of the process of joining the community. Under certain instances clubs may represent the center of the community society. In these instance club membership can provide an opportunity to increase self esteem (Aberback 1969). Several MUCC clubs have obtained this status. These clubs tend to be active in the community, require certain participation by membership, and provide a socializing mechanism for members.

Another motivating factor seems to be an interest in issues affecting an individual's interest. The political support of achieving a collective good was higher for interested IAMs than for other subscribers.

Implications

Activating Political Involvement

MUCC uses its membership to affect political outcomes involving conservation issues. It is important for this group to maintain a membership ready to respond. Clubs appear to be the most likely source for action response. Many club members have already shown a degree of commitment to conservation issues. Clubs also provide an important avenue for information dissemination to the membership. Both club meetings and newsletters can heighten the urgency of response to critical issues.

Although many of the IAMs show some feeling of political helplessness they are avid readers of the magazine. The magazine may provide an important avenue to motivate IAM participation. If IAMs could expect enough others to respond to an issue there is the possibility that individual helplessness can be overcome and IAMs can be motivated to respond. This situation has occurred several times on highly important issues. Special bulletins inserted into the magazine have prompted overwhelming response. This technique may have limitations by desensitize members through over use.

The involvement of Solicited members remains the biggest question. It is highly unlikely they will respond to issues dealing with hunting, fishing or other outdoor recreation pursuits. The magazine is not a good avenue to

disseminate information since readership is low. This group may require special mailings on selected environmental issues for motivation.

Maintaining IAMs

It is clear from this survey that a goal of MUCC should not be elimination of the IAM membership. The IAM class provides several benefits to this organization.

It acts as a reservoir for new club members. Readers who are looking at the magazine purely for entertainment may be drawn to other articles about the organization and its objectives. Knowledge gained from this experience can increase MUCC's utility for members. An increase in interest can lead to a desire to become more active in the organization and join a club. The scope of this study did not include this aspect, but may be appropriate for future work.

Many members experience a time when their activity with MUCC is curtailed. Factors affecting involvement may include health, age, competition for time or a move which takes member to a new area. The magazine can be important to maintaining a membership link until the situation again allows for more involvement.

The magazine may also aid members whose activity in outdoor recreation or club interest has declined because of increasing age or failing health. The interest in achieving

the goals of MUCC may still be present. In this case, the magazine becomes an important link on current information and issues pertaining to natural resource protection.

Subscribers who are not interested in joining clubs but are interested in political involvement, provide a pool of voters for issues on either outdoor recreation or resource protection. Magazine subscribers with an interest in politics can be motivated to respond when issues arise. This group of supporters requires less maintenance and on critical issues can be just as compelling as club members.

Increasing club membership

Although IAM members can provide a significant source of information and support for MUCC's programs, club membership retains an advantage of increasing membership communication and political activity. IAMs should be encouraged to join clubs by providing the goods and services desired by IAMs.

IAMs interested in joining clubs have shown great interest in club facilities. These items provide an opportunity to hone skills which members may use. Nearly as important to these interested IAMs are activities and socializing events which involve both family and community. Clubs must be aware that the stereotyped, male sanctuary, conservation club of the past will not be as successful in recruiting new members as clubs providing family activities.

Increasing IAM awareness of member clubs could stimulate the most interested members into seeking local clubs. Again, the magazine could provide the avenue for contact. Currently only club members receive information on local club activities. A section recognizing contributions of clubs could highlight both community and conservation action activities.

Without club membership there is no direct involvement in organizational policy establishment. This can lead to a reduced commitment towards organizational goals and may provide a partial explanation for the greater feeling of political helplessness by IAMs. Increased policy involvement with the organization could be expected to increase commitment to MUCC.

One alternative to increase involvement is to establish county forums for IAMs. Such an opportunity to express views can increase the communication and commitment between IAMs and the parent organization. An increase in member commitment has the potential to increase interest in participation through clubs. It will also provide opportunities for local clubs to boost membership by exposing IAMs to club members.

Solicited Members

This unique group of members will require special attention by MUCC if they are to be retained as active members. This survey clearly shows that the members attracted during the solicitation program are different from the traditional MUCC members.

Although they may be environmentally motivated solicited members are much less attracted and perhaps even repulsed by the consumptive view of MUCC. Providing Michigan Out-of-Doors magazine as an incentive to join may be a marginal private good. A separate environmental communication tool tailored to the ecologicistic, moralistic values of this group may be necessary, but cannot be expected to resolve the lower utilitarian values solicited members hold.⁵

County forums may also provide an opportunity for solicited members to express interests. One complication which may occur is the exposure to MUCC's policies on hunting and fishing. If a solicited member's attitudes are

⁵In 1990 MUCC began publishing a bi-monthly magazine "Tuebor Terra" to address several of these issues identified in a preliminary report to MUCC. The magazine's primary focus has been towards environmental issues facing Michigan. Measuring reaction to this new publication is difficult, but indications from letters to the editor published in the magazine have been highly favorable.

Tuebor Terra can be used as the communication tool for members with little interest in consumptive recreation. It will provide a forum for non hunters and anglers to learn about environmental issues confronting the state. Like Michigan Out-of-Doors it can be used to motivate action on critical issues.

strong enough, exposure to this policy could negatively impact their commitment and decision to remain as MUCC members.

It can be predicted that solicited members will have a shorter membership duration than other members. The benefits of this program will be answered after a determination has been made whether membership with MUCC, even for a short time will have any impact on their attitudes or involvement in environmental issues.

Kellert attitude assessment

The section of the survey which assesses membership environmental attitudes, presents a possible alternative to Kellert's instrument. The instrument using one question per domain is easier to include in longer surveys. The current survey also represents the first use to extend application of these values evaluate attitudes beyond wildlife to the environment in general.

The results obtained from respondents are consistent with those expected from Kellert's model. All members had a strong ecological value component as expected from their membership in an environmental organization. A strong utilitarian component was found among club members and IAMs, reflecting their interest in hunting and angling. Solicited members did not show this attitude at the same level. This again was a predictable finding based on the type of members

in each group. Utilitarian values were also found to differ by sex among solicited members with women being less utilitarian.

Only the humanistic attitude did not show the expected differences. This may be the result of question structure or it may represent a different definition of humanism. Kellert's definition measures the degree which people place human qualities and characteristics on nonhuman items. The question in this survey appears to be measuring a human concern or welfare of nonhuman items.

The use of this technique in the survey has shown possible applications in other areas. Further use of this instrument in more general populations as well as adjustments in question structure is recommended in future surveys.

Summary of Recommendations

To maintain a viable and active membership MUCC must be concerned with continued recruitment of members into club and IAM ranks. This will best be accomplished by:

1. Continue to encourage membership in MUCC through magazine subscriptions and club membership.
2. Maintain IAMs as a potential reservoir for club members and as avenue for nonrenewing club members to maintain contact.
3. Increase IAM commitment by providing opportunities to voice concerns or support on MUCC policy through county forums.
4. Encourage IAMs to become active in clubs by:
 - a. Providing information on club locations and activities through the magazine.
 - b. Encouraging club members to recruit IAMs
 - c. Encouraging clubs to provide goods and services sought by IAMs, particularly family oriented activities.
5. Evaluate solicitation program and the members it is attracting.
6. Continue to provide a separate magazine aimed at members with less utilitarian values

SUMMARY

A total of 2018 MUCC members from two membership categories (club members and individual associate members, IAMs) were surveyed in 1987. In addition 200 magazine subscribers who had signed as the result of a door to door solicitation program were identified as a separate survey group.

With an average age of 48, the general membership of MUCC is dominated by males. The largest percentage of club members were found in the 40-44 year age category, while members over sixty-five years old were the largest percentage of IAMs. Solicited members were the most unique group having the lowest number of individuals over sixty-five. Solicited members also had nearly fifty percent female representation in it's membership.

MUCC members are very active in hunting and fishing recreation. Less than ten percent of the major membership divisions neither hunted nor fished during 1987. Little difference was found in the amount and type of activity between Club members and Individual Associate Members (IAMs). Both club members and IAMs were twice as likely to have hunted or fished during 1987.

In comparison of education and income levels solicited members had a significantly higher percentage of members

receiving college and graduate degrees. They also could be expected to have a higher family income than either club or IAM members. Solicited members were more likely to be employed in educational and medical professions while being less likely to be employed in factory positions.

MUCC members indicate a high level of political activity with over 92% of the membership registered to vote. Club members indicated the highest level of voting activity and contact with legislators. They were also the most likely to indicate having a voice in conservation politics as an important reason to join MUCC.

IAMs on the other hand were the most likely to indicate some political helplessness. Two-thirds of this group agreed that legislators were more likely to listen to industry than to constituents.

A major difference was found in other types of major organizations individuals of the three major groups indicated membership. Club members and IAMs were more likely to join organizations supporting consumptive use of wildlife such as National Rifle Association, Ducks Unlimited, and Trout Unlimited. Club members indicated the highest affiliation of the major membership groups. When comparing membership in organizations not actively supporting consumptive uses solicited members were more likely to be members. Examples of these organizations include Greenpeace, National Audubon Society, and Michigan

Environmental Council.

IAMs were most likely to read many of the major magazine sections including hunting and fishing articles as well as outdoor and special reports. They also had a high readership of the monthly columns, conservation report, legislative report and letters to the editor. Solicited members were the least likely to read the magazine and had the lowest percentage of members indicating the magazine as important to their membership.

This magazine readership was also reflected in the importance of Kellert values indicated by the membership groups. Both IAMs and club members had the highest means for Utilitarian values. Solicited members had high scores in Ecologistic values while scores for Utilitarian values were lowest. A comparison of scores for male and female solicited members showed males again with higher Utilitarian values and females with significantly higher humanistic values.

A closer look at the IAMs revealed two distinct groups. IAMs interested in joining and MUCC affiliate were considerably more similar to club members than those IAMs not interested in local club membership. Noninterested IAMs were older and more likely to see their participation in environmental activities declining over the next ten years.

Interested IAMs had the highest level of recreation participation of any membership group. They also showed the

highest level of political helplessness. Interested IAMs were more likely to have friends and close relatives that had similar attitudes towards MUCC. This may be an important point in recruiting new club members. Over 50% of the current club members said they were introduced to their current club by a friend or close relative.

Also important in recruitment of membership is the ability of current MUCC clubs to provide opportunities sought by interested IAMs. IAMs showed a similar interest in facilities such as shooting ranges club house facilities as current club members. A major difference was found in the desire of interested members to have more family oriented activities and youth programs than are currently being offered by clubs.

Clubs may have an impact on membership attitudes and development of interest in the both conservation politics and the whole environment. MUCC members over fifty years of age were more likely to read those portion of the magazine dealing with current issues and articles on environmental concerns. Members under fifty were not as likely to indicate having a voice in conservation politics as an important factor in membership. Older members participated less in outdoor recreation but were more likely to read portions of the magazine dealing with environmental issues and politics. They also indicated supporting MUCC programs and having a voice in conservation politics as important membership factors.

Four distinct groups of memberships could be identified by the survey information. These included club members, IAMs interested in joining an MUCC club, IAMs not interested in joining a club and Solicited members. Each of these groups possessed a significantly different member profile.

Members joined MUCC for several reasons. Some of these can be identified as private goods. Goods which are received by an individual for membership. Others are identified as collective goods, such as clean air and clean water. Some of the most important reasons for membership identified in the survey include.

1. Use of facilities available at an affiliate club.
2. To receive Michigan Out-of-doors magazine.
3. To support conservation activities taken on by the Michigan United Conservation Clubs
4. To have a voice in politics involving conservation.
5. To socialize with others with similar attitudes.
6. To increase personal self-esteem.

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Appendix A.
MUCC By-laws, membership descriptions.

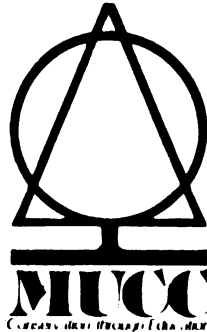
Michigan United Conservation Club
By-Laws

ARTICLE II, SECTION 1. Classification--There shall be the following classes of members, all generally hereinafter referred to as "Members":

Class A "Member Clubs" are those organized groups of persons, such as clubs, societies and associations, of a local character consisting of ten (10) or more adults who are organized for the purpose of conservation. Any individual associated with a Class A Member Club, for whom annual dues or other membership fees have been paid, shall be considered a member of MUCC.

Class E, "Individual Members: are those persons not affiliated with a Member Club who wish to become associated with the Corporation for the purpose of supporting its programs by contributing annually such amount as is prescribed elsewhere in these By-Laws.

Appendix B.
Survey Instrument sent to club members with
changes included in the IAM survey and
survey cover letter.



MICHIGAN UNITED CONSERVATION CLUBS
 2101 Wood St. ● P.O. Box 30235 ● Lansing, MI 48909 ● 517-371-1041

Dear MUCC member,

As you know by now 1987 marked the Fiftieth Anniversary of the founding of the Michigan United Conservation Clubs. MUCC has grown to become the premiere conservation organization in Michigan. Local, state and national leaders look to us in formulating natural resource policy decisions.

The success of MUCC has been our ability to mobilize our grass roots membership to support decisions based on wise conservation principles.

Looking ahead to the next fifty years it is even more important to keep contact with our increasing membership. In order to accomplish the task we have contracted with Michigan State University to conduct a survey. Please share with us your interests, values and concerns involving conservation and outdoor recreation.

We believe the information you provide us is essential if decisions about our organization are to effectively represent your interests for the next 50 years.

Please take the time to carefully complete the enclosed survey.

Thank you,

A handwritten signature in dark ink, appearing to read "Gerald Goodman".

Gerald Goodman
 President, MUCC

We would like to take this opportunity to welcome you as part of the MUCC membership survey. Your answers will represent a small sample of the MUCC membership and as such your response is very important in order to obtain a representative sample of all MUCC members.

Your response is strictly voluntary and you may refuse to answer any or all of the questions. Your answers will be treated confidentially and will be combined with those of other respondents to assure your anonymity.

Your return of this filled out questionnaire constitutes your consent to participate in this study.

Raymond A. Rustem,
Research Assistant

R. Ben Peyton,
Associate Professor

DIRECTIONS

- 1). This questionnaire should be completed only by the person to whom it is addressed.
- 2). Please indicate the response best reflecting your feelings, beliefs or what you actually do.
- 3). Do not write your name on the questionnaire. The questionnaire has an identification number that will be checked off to identify those who agree to participate.
- 4). Please return the questionnaire using the pre-paid return envelope provided.

1). How many years have you been a member of Michigan United Conservation Clubs? _____

2). Are you a registered voter? ☐ YES ☐ NO

3). Did you vote in the last presidential election?
☐ YES ☐ NO

4). How often do you vote in the following elections:

	Don't Know	Never	Occasionally	Sometimes	Always
NATIONAL (Presidential)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STATE (Gubernatorial)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LOCAL (County, Township)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5). How would you rate the following statement?

Legislators are more likely to be influenced by industry rather than constituents when considering environmental legislation.

STRONGLY
DISAGREE

STRONGLY
AGREE

1

2

3

4

5

- 6). How often do you write a letter or phone your state or national legislator expressing your views on an issue?

NEVER		SOMETIMES		OFTEN
1	2	3	4	5

- 7). Please check each of the following environmental/conservation organizations you currently belong to:

NATIONAL WILDLIFE FEDERATION _____

NATIONAL RIFLE ASSOCIATION _____

NATIONAL AUDUBON SOCIETY _____

SIERRA CLUB _____

SAFARI CLUB INTERNATIONAL _____

DUCKS UNLIMITED _____

NATIONAL TROUT UNLIMITED _____

GREENPEACE _____

MICHIGAN ENVIRONMENTAL
COUNCIL _____

OTHER PLEASE SPECIFY _____

- 8). Excluding the above environmental/conservation clubs, how many other organizations do you currently pay dues to? _____

- 9). Following is a list of outdoor recreation activities. Please indicate for each item the number of trips you took during the last year, to participate in these activities.

	NUMBER OF TRIPS					
	0	1-2	3-5	6-8	9-10	10+
NATURE PHOTOGRAPHY . .	[]	[]	[]	[]	[]	[]
FISHING	[]	[]	[]	[]	[]	[]
CAMPING	[]	[]	[]	[]	[]	[]
TRAPPING	[]	[]	[]	[]	[]	[]
HIKING	[]	[]	[]	[]	[]	[]
HUNTING	[]	[]	[]	[]	[]	[]
BOATING	[]	[]	[]	[]	[]	[]
WATCHING WILDLIFE . .	[]	[]	[]	[]	[]	[]
OFF-ROAD RIDING . . .	[]	[]	[]	[]	[]	[]

- 10). How many other activities have you attended in the last year which were indirectly related to outdoor recreation activities (sport or boat shows, wildlife art shows, movies, lectures, hunting or fishing workshops)?

NUMBER OF TRIPS 0 [] 1-2 [] 3-5 [] 6-8 [] 9-10 []

- 11). For each of the items below indicate your level of participation.

	DO NOT PARTICIPATE			OFTEN PARTICIPATE		
SPORTS (softball, bowling, basketball etc.)	0	1	2	3	4	5
CONCERTS	0	1	2	3	4	5
THEATER	0	1	2	3	4	5
MOVIES	0	1	2	3	4	5
ATTENDING OR WATCHING SPORTS EVENTS	0	1	2	3	4	5

- 12). Below is a list of outdoor activities. For each of the activities in which you participate, indicate the way, in which you most prefer to participate. Please check only one for each activity.

	DO NOT PARTICIPATE	ALONE	WITH FRIENDS	WITH RELATIVES	WITH IMMEDIATE FAMILY
Hunting	_____	_____	_____	_____	_____
Fishing	_____	_____	_____	_____	_____
Trapping	_____	_____	_____	_____	_____
Camping	_____	_____	_____	_____	_____
Boating	_____	_____	_____	_____	_____
Hiking	_____	_____	_____	_____	_____
Off Road Vehicle Driving	_____	_____	_____	_____	_____

- 13). How would you compare the attitudes of the following people to your own attitudes towards MUCC?

	<u>Don't</u> <u>Know</u>		<u>Strongly</u> <u>Disagree</u>		<u>Strongly</u> <u>Agree</u>	
My spouse has about the same attitude towards MUCC as I do.	0	1	2	3	4	5
My close relatives have the same attitude towards MUCC as I do.	0	1	2	3	4	5
My friends have about the same attitude towards MUCC as I do.	0	1	2	3	4	5

- 14). Compared to your present activities in environmental concerns (e.g., interest in environmental quality, outdoor recreation, membership in organizations) rate your involvement during the:

	MORE	SAME	LESS
PAST TEN YEARS	_____	_____	_____
NEXT TEN YEARS	_____	_____	_____

- 15). How much time and effort do you believe MUCC should be applying in each of these tasks?

	No Opinion	Should do more		Keep it the same		Should do less
EDUCATING THE PUBLIC ABOUT CONSERVATION/ ENVIRONMENT	0	1	2	3	4	5
PROMOTING SOLID WASTE MANAGEMENT	0	1	2	3	4	5
LOBBYING ON GUN CONTROL LEGISLATION	0	1	2	3	4	5
LOBBYING FOR OUTDOOR RECREATION OPPORTUNITIES	0	1	2	3	4	5
PROTECTING GREAT LAKES WATER QUALITY	0	1	2	3	4	5
PROTECTING WATER QUALITY (Ground and Surface Water)	0	1	2	3	4	5
PROTECTING AIR QUALITY	0	1	2	3	4	5
PROMOTING TOXIC WASTE CLEAN UP	0	1	2	3	4	5
PROTECTING ANGLERS AND HUNTERS RIGHTS	0	1	2	3	4	5

- 16). How often do you read the following sections in Michigan-Out-of-Doors magazine?

	NEVER READ		SOMETIMES READ		ALWAYS READ
FEATURE ARTICLES (HUNTING AND FISHING)	1	2	3	4	5
FEATURE ARTICLES (GENERAL OUTDOORS)	1	2	3	4	5
SPECIAL CONSERVATION REPORTS	1	2	3	4	5
EDITORIALS	1	2	3	4	5
REGIONAL REPORTS . .	1	2	3	4	5
LETTERS TO THE EDITOR	1	2	3	4	5
LEGISLATIVE REPORT .	1	2	3	4	5
CONSERVATION UPDATE .	1	2	3	4	5
CLASSIFIED ADS . . .	1	2	3	4	5
PAGE ADVERTISING . .	1	2	3	4	5

- 17). Other than club or MUCC membership dues, approximately how much did you spend with MUCC last year on purchases and donations?

☐ Dont Know ☐ \$0 ☐ \$1-\$10 ☐ \$11-\$25
☐ \$26-\$49 ☐ \$50 +

- 18). Please mark below which items you purchase from MUCC.

_____ Books

_____ Calendars

_____ Topo Maps, Lake Maps, Nautical Charts

_____ Raffle Tickets

_____ Christmas or Greeting Cards

_____ Other Merchandise, Please Describe _____

- 19). Major ecosystems such as wetlands, forests, lakes and streams are being changed. Wetlands are being filled to provide new sites for farming and development. Pristine lakes and watersheds are being destroyed by acid rain. When such events occur, there are several concerns we can use in forming our attitude about the changes. Please rate the four concerns listed below on their importance to you in forming such attitudes.

<u>CONCERNS</u>	<u>NOT</u>			<u>EXTREMELY</u>	
	<u>IMPORTANT</u>			<u>IMPORTANT</u>	
A) There is a loss of recreational opportunities and/or economically valuable resources. (hunting, fishing, timber, etc.)	1	2	3	4	5
B) The ecosystem and it's species have a natural right to exist.	1	2	3	4	5
C) The loss of the ecosystem and species will have an impact on the functioning of other ecosystems.	1	2	3	4	5
D) The individual animals living in the ecosystem will be caused to suffer from the disturbance.	1	2	3	4	5

- 20). Please consider the four concerns again and rank them from most important to least important in forming your attitudes about major ecosystem changes in our environment. Place the letters A, B, C, and D on the appropriate spaces.

MOST IMPORTANT

LEAST IMPORTANT

21). What is your sex? ☐ MALE ☐ FEMALE

22). What is your age? _____ YEARS OF AGE

23). What is the highest level you completed in school? Please check the one that best applies.

- ☐ 1. GRADE SCHOOL
- ☐ 2. SOME HIGH SCHOOL
- ☐ 3. HIGH SCHOOL DIPLOMA
- ☐ 4. SOME COLLEGE OR ASSOCIATE DEGREE
- ☐ 5. COLLEGE DEGREE (B.S. OR B.A.)
- ☐ 6. ADVANCED DEGREE (M.S., Ph.D., M.D.,
D.O., D.D.S., D.V.M., J.D.)

24). What is your total family income before taxes (include all wage earners in your household)?

- ☐ 1. UNDER \$15,000
- ☐ 2. \$15,000 to \$24,999
- ☐ 3. \$25,000 to \$34,999
- ☐ 4. \$35,000 to \$44,999
- ☐ 5. \$45,000 to \$54,999
- ☐ 6. \$55,000 AND OVER

25). What is your primary occupation?

- ☐ 1. FARMING RELATED
- ☐ 2. EDUCATION (TEACHING)
- ☐ 3. MANAGERIAL
- ☐ 4. FACTORY WORKER
- ☐ 5. SALESPERSON
- ☐ 6. MEDICAL PROFESSIONAL
- ☐ 7. CONSTRUCTION
- ☐ 8. STUDENT
- ☐ 9. RETIRED
- ☐ 10. OTHER PLEASE SPECIFY _____

26). How many years have you been working for your current employer?
 _____ YEARS

27). Is your spouse currently employed?

NOT
MARRIED
[]

YES
[] PART TIME
[] FULL TIME

NO
[]

28). How many children do you have? [] 0 (Go to question 32)
 [] 1-2
 [] 3-5
 [] 5+

29). What is the age of your youngest child?

(AGE IN YEARS)

UNDER 9 [] 9-11 [] 12-15 [] 16-18 [] OVER 18 []

30). Would you describe your children's participation in activities
 such as sports, theatre, music, youth groups, etc., as:

NOT AT ALL
ACTIVE
1

2

SOMEWHAT
ACTIVE
3

4

EXTREMELY
ACTIVE
5

31). How would you describe the demand your children's above activities
 place on your non-work time?

NONE OF
MY TIME
1

2

SOME OF
MY TIME
3

4

MOST OF
MY TIME
5

32). In what county do you live ? _____

33). Would you consider the area where your home is located to be:

- ☐ RURAL
- ☐ SMALL TOWN
- ☐ SUBURBAN
- ☐ SMALL CITY
- ☐ LARGE CITY

34). How were you introduced to your present club?

(check only one)

- ☐ PERSONAL KNOWLEDGE
- ☐ FRIEND
- ☐ CO-WORKER
- ☐ RELATIVE
- ☐ NEWSPAPER
- ☐ SPECIAL EVENT
(FAIR, MALL SHOW)
- ☐ OTHER, PLEASE SPECIFY:
- ☐ DON'T REMEMBER

35). How many other MUCC clubs are you currently a member of?

0 1 2 3 4 5 or more

36). Please rate the following items on their importance in maintaining your club membership.

	NOT VERY IMPORTANT				VERY IMPORTANT
TO RECEIVE MICHIGAN	1	2	3	4	5
OUT-OF-DOORS MAGAZINE					
TO SUPPORT MUCC ACTIVITIES . . .	1	2	3	4	5
AND PROGRAMS					
TO HAVE A VOICE IN POLITICS . . .	1	2	3	4	5
INVOLVING CONSERVATION					
CLUBHOUSE FACILITIES	1	2	3	4	5
SHOOTING RANGE FACILITIES	1	2	3	4	5
(SKEET, TRAP, ARCHERY, PISTOL)					
COMPETITIVE SHOOTING LEAGUES . .	1	2	3	4	5
CLUB HUNTING OR FISHING	1	2	3	4	5
OPPORTUNITIES					
COMMUNITY PROJECTS	1	2	3	4	5
CLUB FAMILY ACTIVITIES	1	2	3	4	5
YOUTH ACTIVITIES	1	2	3	4	5
REGULAR PROGRAMS (SPEAKERS, . . .	1	2	3	4	5
FILMS, SEMINARS)					
PEOPLE WITH	1	2	3	4	5
SIMILAR INTERESTS					
OTHER	PLEASE SPECIFY _____				

Alternative questions provided to IAMs.

32). In what county do you live ? _____

33). Would you consider the area where your home is located to be:

- ☐ RURAL
☐ SMALL TOWN
☐ SUBURBAN
☐ SMALL CITY
☐ LARGE CITY

34). Please rate the following as to their importance in your decision to join MUCC.

	<u>Not</u>		<u>Very</u>		
	<u>Important</u>		<u>Important</u>		
TO RECEIVE MICHIGAN-OUT-OF-DOORS MAGAZINE	1	2	3	4	5
TO SUPPORT MUCC ACTIVITIES AND PROGRAMS	1	2	3	4	5
TO HAVE A VOICE IN POLITICS INVOLVING CONSERVATION	1	2	3	4	5
OTHER, PLEASE DESCRIBE:	1	2	3	4	5

35). Are you aware of any local MUCC affiliated clubs in your area?
☐ YES ☐ NO

36). If yes what is the approximate distance to the affiliate?
_____ miles

37). Are you currently a member of any MUCC affiliated club?

☐ NO ☐ YES If yes please skip to question 40.

38). Have you ever been a member of a local MUCC affiliate?

☐ YES ☐ NO

39). If yes, please indicate the importance each of the following played in your decision not to renew your membership in that affiliate?

	Not Important				Very Important
MOVED FROM THE AREA 1	2	3	4	5	
COULD NOT AFFORD 1	2	3	4	5	
MEMBERSHIP FEE					
NO LONGER PARTICIPATE IN . 1	2	3	4	5	
ACTIVITIES OFFERED					
NO TIME TO USE CLUB 1	2	3	4	5	
FACILITIES					
NOT INTERESTED IN 1	2	3	4	5	
ACTIVITIES OFFERED BY CLUB					
I AM INVOLVED IN TOO MANY . 1	2	3	4	5	
OTHER ACTIVITIES					
OTHER REASON 1	2	3	4	5	
(PLEASE SPECIFY)					

40). Do you have an interest in joining or rejoining a local club?

☐ YES ☐ NO

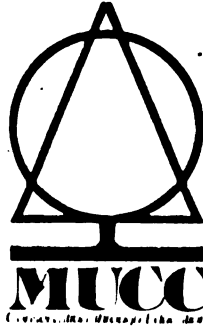
If you answer is NO, you do not need to answer the following questions.

41). How far would you be willing to travel to join a club?

42). How important would each of the following facilities or activities be to your decision to join a local club?

	<u>NOT</u> <u>IMPORTANT</u>			<u>VERY</u> <u>IMPORTANT</u>	
CLUBHOUSE FACILITIES	1	2	3	4	5
SHOOTING RANGE FACILITIES . . . (TRAP, SKEET, ARCHERY, RIFLE, ETC.)	1	2	3	4	5
COMPETITIVE SHOOTING LEAGUES .	1	2	3	4	5
CLUB FISHING OR HUNTING . . . OPPORTUNITIES	1	2	3	4	5
COMMUNITY PROJECTS	1	2	3	4	5
CLUB FAMILY ACTIVITIES	1	2	3	4	5
YOUTH ACTIVITIES	1	2	3	4	5
REGULAR PROGRAMS (SPEAKERS, . FILMS, SEMINARS)	1	2	3	4	5
PEOPLE WITH SIMILAR INTERESTS	1	2	3	4	5
OTHER	PLEASE SPECIFY _____				

Appendix C.
Nonrespondents letter and response postcard.



MICHIGAN UNITED CONSERVATION CLUBS

2101 Wood St. ● P.O. Box 30235 ● Lansing, MI 48909 ● 517/371-1041

Dear MUCC Member,

Earlier we sent you a survey designed to get your opinions as a member of the Michigan United Conservation Clubs. We have been encouraged by the response, but we need your input. We believe that you have different opinions than those members who have responded. In order for MUCC to accurately represent it's members we need your responses.

We expect to be analyzing the results of these surveys very shortly, but it is not too late to have your views included as part of the analysis. Please fill out the survey and return it in the self-addressed, stamped envelope. If you have already filled out the survey, please disregard this notice and thank you for your cooperation.

If you choose not to return the survey, we would still like to hear from you. Please indicate your reason on the attached card and drop it in the mail.

If you wish to respond, but have misplaced your survey, please return the attached card.

Sincerely,

Raymond A. Rustem
Research Assistant

Appendix D.
Telephone survey instrument used to
determine nonresponse bias.

I do not intend to respond to the survey because:

(please check all that apply)

- ☐ **I do not have the time to fill out the survey.**
- ☐ **I do not believe the survey will be of any value.**
- ☐ **I do not wish to answer questions about my personal life.**
- ☐ **Other reason, please indicate:_____**

- ☐ **I want to respond, please send another survey form.**
(print your name and address below)

INTERVIEWER: Hello, my name is _____. I am conducting a follow-up with the MUCC membership survey. Our records indicate that we did not receive a completed survey from you. Would you mind taking a few minutes to answer some questions about your membership in MUCC?

If respondent replies no please indicate any reason given.

QUESTIONS

1). How many years have you been a member of Michigan United Conservation Clubs? _____

15). How much time and effort do you believe MUCC should be applying in each of these tasks? Please rank this from 1 MUCC should do more to 5 MUCC should do less, or no opinion.

	No Opinion	Should do more	Keep it the same	Should do less		
EDUCATING THE PUBLIC ABOUT CONSERVATION/ ENVIRONMENT	0	1	2	3	4	5 .
LOBBYING ON GUN CONTROL LEGISLATION	0	1	2	3	4	5
PROTECTING GREAT LAKES WATER QUALITY	0	1	2	3	4	5
PROTECTING AIR QUALITY	0	1	2	3	4	5
PROTECTING ANGLERS AND HUNTERS RIGHTS	0	1	2	3	4	5

32) In what county do you live? _____

34) Please rate the following as to their importance in your decision to join MUCC. With one being not important and five ranking as an important reason.

	<u>Not</u> <u>Important</u>			<u>Very</u> <u>Important</u>	
TO RECEIVE MICHIGAN-OUT-OF -DOORS MAGAZINE	1	2	3	4	5
TO SUPPORT MUCC ACTIVITIES AND PROGRAMS	1	2	3	4	5
TO HAVE A VOICE IN POLITICS INVOLVING CONSERVATION	1	2	3	4	5
OTHER, PLEASE DESCRIBE:	1	2	3	4	5

22) In what age category do you best fit?

- ☐ BELOW 25
☐ 25-35 YEARS OLD
☐ 35-50 YEARS OLD
☐ 50-65 YEARS OLD
☐ OVER 65

Indicate the sex of the respondent

☐ MALE ☐ FEMALE

PHONE SURVEY RESPONSE

ID NUMBER _____

1) _____ YEARS

15) CONSERVATION EDUCATION	1	2	3	4	5
GUN CONTROL LOBBYING	1	2	3	4	5
GREAT LAKES PROTECTION	1	2	3	4	5
AIR QUALITY PROTECTION	1	2	3	4	5
PROTECT HUNTERS AND ANGLERS RIGHTS	1	2	3	4	5

32) COUNTY OF RESIDENCE _____

34) IMPORTANCE FOR MEMBERSHIP

MICHIGAN OUT-OF-DOORS MAGAZINE	1	2	3	4	5
SUPPORT MUCC ACTIVITIES	1	2	3	4	5
VOICE IN CONSERVATION POLITICS	1	2	3	4	5
OTHER	1	2	3	4	5

AGE CATEGORY 1 2 3 4 5

SEX ____ MALE ____ FEMALE

Appendix E
Chi-Square and significance
for selected variables
between MUCC membership groups.

Table 32. Chi square test of significance between respondents (mailed survey) and nonrespondents (telephone survey) on selected variables for club members and IAMs.

Variable	club members survey			IAMs survey		
	χ^2	df	probability	χ^2	df	probability
Joined MUCC to receive magazine	8.00	4	0.091	20.30	4	0.000
Joined MUCC to support programs	9.53	4	0.049	7.82	4	0.098
Joined MUCC to have a voice in conservation politics	9.34	4	0.053	12.53	4	0.014
Should MUCC do more/less for conservation education	14.76	5	0.011	7.39	5	0.193
Should MUCC do more/less on gun control lobbying	13.48	5	0.019	7.06	5	0.216
Should MUCC do more/less in protecting Great Lakes	3.94	5	0.557	1.75	5	0.883
Should MUCC do more/less in protecting air quality	2.80	5	0.731	2.87	5	0.721
Should MUCC do more/less in protecting angler/hunter rights	5.57	5	0.351	7.80	5	0.168

Table 33. Comparison of occupation variables between membership groups.

Occupation	Club vs Solicited		Club vs IAM		IAM vs Solicited	
	χ^2	P	χ^2	P	χ^2	P
Farm related	2.14	0.14	2.82	0.09	0.99	0.32
Educational	10.06	0.002	0.04	0.85	11.21	0.001
Managerial	0.90	0.34	0.03	0.86	1.06	0.30
Factory	2.10	0.15	0.33	0.56	2.88	0.09
Sales	0.01	0.92	0.02	0.89	0.001	0.97
Medical	7.22	0.007	1.91	0.17	13.04	<0.001
Construction	2.55	0.11	0.55	0.46	1.74	0.19
Student	1.11	0.29	1.79	0.18	0.03	0.87
Retired	3.27	0.07	4.92	0.03	7.51	0.006

*Degrees of freedom for all tests equals 1.

Table 34. Comparison of family variables between membership groups.*

Variable	Club vs Solicited		Club vs IAM		IAM vs Solicited	
	χ^2	P	χ^2	P	χ^2	P
Married	0.31	0.58	2.17	0.14	1.55	0.21
Spouse working	7.00	0.08	0.97	0.33	9.97	0.002
Number of Children	0.09	0.76	0.02	0.88	0.14	0.71
Youngest child is less than nine	11.13	<0.001	0.03	0.86	9.79	0.002
Children are very active	2.86	0.09	<0.01	0.99	2.96	0.09
Children require most of my time	0.45	0.50	0.17	0.68	0.25	0.61

*Degrees of freedom for all tests equals 1.

Table 35. Comparison of recreation participation between membership groups.*

Variable	Club vs Solicited		Club vs IAM		IAM vs Solicited	
	X ²	P	X ²	P	X ²	P
Photography	0.06	0.81	5.91	0.02	2.29	0.13
Fishing	42.35	<0.001	3.67	0.06	65.71	<0.001
Camping	10.55	0.001	0.54	0.46	14.05	<0.001
Trapping	7.23	0.007	3.85	0.05	4.30	0.04
Hunting	53.43	<0.001	2.62	0.11	46.72	<0.001
Boating	16.71	<0.001	2.08	0.15	24.24	<0.001
Watching Wildlife	7.39	0.007	1.79	0.18	11.18	<0.001
ORV	6.04	0.01	12.64	<0.001	17.60	<0.001
Attended sport show, seminar	19.61	<0.001	?		5.87	0.02

*Degrees of freedom for all tests equals 1.

Table 36. Comparison of cross memberships between membership groups.*

Membership	Club vs Solicited		Club vs IAM		IAM vs Solicited	
	χ^2	P	χ^2	P	χ^2	P
National Wildlife Federation	0.24	0.63	1.00	0.32	<0.001	0.99
National Rifle Assoc.	34.17	<0.001	17.96	<0.001	16.29	<0.001
Ducks Unlimited	5.20	0.03	3.86	0.05	2.04	0.15
Trout Unlimited	1.10	0.10	1.59	0.21	0.32	0.57
Safari Club International	0.47	0.49	4.98	0.03	0.53	0.47
National Audubon Soc.	6.56	0.01	3.65	0.06	0.86	0.36
Greenpeace	23.94	<0.001	0.06	0.82	25.05	<0.001
Sierra Club	3.19	0.07	0.004	0.95	4.39	0.04

*Degrees of freedom for all tests equals 1.

Table 37. Comparison of magazine readership between membership groups.*

Article Topics	Club vs Solicited		Club vs IAM		IAM vs Solicited	
	χ^2	P	χ^2	P	χ^2	P
Hunting and Fishing	40.24	<0.001	24.72	<0.001	70.02	<0.001
General Outdoor	7.08	0.008	36.76	<0.001	28.61	<0.001
Special Conservation Features	13.08	<0.001	22.45	<0.001	35.45	<0.001
Editorials	7.07	0.008	15.73	<0.001	22.41	<0.001
Regional Report	18.89	<0.001	32.05	<0.001	51.67	<0.001
Letters to the Editor	12.31	<0.001	3.77	0.05	21.09	<0.001
Legislative Report	20.01	<0.001	3.01	0.08	28.37	<0.001
Conservation Update	11.46	<0.001	11.29	<0.001	25.19	<0.001
Classified Ads	19.79	<0.001	7.49	0.006	31.24	<0.001
Page Advertising	14.66	<0.001	6.21	0.01	26.56	<0.001

*Degrees of freedom for all tests equals 1.

Table 38. Comparison of Attitude value scores for Kellert domains between membership groups.*

Kellert Domain	Club vs Solicited		Club vs IAM		IAM vs Solicited	
	X²	P	X²	P	X²	P
Utilitarian	32.70	<0.001	0.00	0.99	32.82	<0.001
Moralistic	9.95	<0.01	0.14	0.71	8.35	<0.01
Ecologistic	12.98	<0.001	1.27	0.26	12.94	<0.001
Humanistic	0.12	0.72	5.37	0.02	1.05	0.30

*Degrees of freedom for all tests equals 1.

Table 39. Comparison of Recreation activity between IAMs interested and not interested and club members.

Recreation Activity	Interested vs not Interested		Club vs Interested	
	X²	P	X²	P
Photography trip	4.04	0.04	10.23	<0.01
Fishing trip	7.69	<0.01	8.90	<0.01
Camping trip	17.88	<0.001	8.38	<0.01
Trapping trip	0.96	0.33	1.08	0.20
Hiking trip	1.76	0.18	4.69	0.03
Hunting trip	21.15	<0.001	2.05	0.20
Boating trip	4.48	0.03	5.84	0.02
Watching Wildlife	3.58	0.06	5.35	0.02
ORV trip	0.68	0.41	11.99	<0.001
Attended sport show seminar, etc.	39.85	<0.001	0.89	0.35

*Degrees of freedom for all tests equals 1.

Table 40. Comparison of political activity between IAMs interested and not interested and club members.*

Political Activity	Interested vs not Interested		Club vs Interested	
	X²	P	X²	P
Registered Voter	0.02	0.90	2.58	0.11
Voted in 1984	0.14	0.71	1.37	0.24
Have some feeling of political helplessness	6.12	0.01	11.38	<0.001
Contact legislators frequently	0.90	0.34	2.82	0.09

*Degrees of freedom for all tests equals 1.

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