BECOMING AN OUTDOORS WOMAN:
EFFECT ON ACTIVITIES AND ATTITUDES

by

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ABSTRACT

Women have typically been under-represented in the numbers of hunters and anglers. A 1990 workshop called "Breaking Down the Barriers to Participation of Women in Angling and Hunting" identified 21 reasons for their low participation in these activities. Barriers related to lack of information led to the development of the "Becoming an Outdoors-Woman" program—workshops teaching outdoor skills to adult women. Since the first clinic in Wisconsin in 1991, thousands of women have been reached across the United States and Canada. This research project surveyed the 800 participants from the first three years, investigating changes in level of outdoor activities and changes in attitude toward those activities. A control group was also surveyed for comparison of changes over the same period. Fifty-nine percent of the participants sent surveys responded, and 53 percent of the control population responded. Participants did show an increase in activities taught at the workshops, and also showed less decrease than the control group. The participants' attitudes toward hunting, fishing, and other outdoor activities were also more positive following the workshop than were attitudes of the control group over the past year. There was no significant difference in equipment and clothing purchases between the two groups. The positive implications of this study have been widely recognized, resulting in national sponsorship and national implementation of the "Becoming an Outdoors-Woman" program.
ACKNOWLEDGEMENTS

Dr. Christine Thomas is the heart and soul behind the "Becoming an Outdoors-Woman" program. Without her, there would be no reason for this research. Without her, I would not have had the opportunity to meet the many, many, wonderful people involved in these workshops across the country. She is my mentor, my taskmaster, my friend.

My committee members, Dr. Randy Champeau and Dr. Jim Gingles, have demonstrated their belief in me throughout the years. The years working with this thesis have been no exception.


Thanks to the women across the country who responded to my survey and who have responded so positively to the "Becoming an Outdoors-Woman" workshops.

And, thanks to my fuzzy buddies who are always there.
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One is not born a woman,

one becomes one.

....Simone de Beauvoir
INTRODUCTION

Background

Women are over half of the population. But low participation by women characterizes many outdoor activities. It appears that some women would like to learn outdoor skills such as canoeing, fishing, and shooting (Thomas and Peterson, 1993). While numbers of women involved in hunting in angling are increasing, only about ten percent of hunters and thirty percent of anglers are women (USFWS, 1991). Why is this so? What sort of barriers to participation in hunting and angling do they face?

Dr. Christine L. Thomas, professor in the College of Natural Resources at the University of Wisconsin-Stevens Point, was intrigued by these questions.

In 1990, the College of Natural Resources and the Wisconsin Department of Natural Resources co-sponsored a workshop, under the leadership of Dr. Thomas, called "Breaking Down the Barriers to Participation of Women in Angling and Hunting." Focus groups identified perceived barriers and generated suggestions for eliminating or reducing them (Table 1). Barriers included intimidation, the image of the "slob hunter," the difficulty of finding clothing and equipment that fits women, social pressure against women who hunt, and the lack of opportunities to learn hunting and angling skills (Thomas and Peterson, 1990; 1993).
<table>
<thead>
<tr>
<th>Barrier</th>
<th>No. of Responses*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image of sport as portrayed by anti-hunting movement</td>
<td>7</td>
</tr>
<tr>
<td>Expense or availability of suitable equipment</td>
<td>7</td>
</tr>
<tr>
<td>Social pressure from peers, significant others, family members, male hunters or outfitters who view hunting as a man’s sport</td>
<td>6</td>
</tr>
<tr>
<td>Lack of female role models</td>
<td>5</td>
</tr>
<tr>
<td>Raised in non-hunting or angling family situation</td>
<td>5</td>
</tr>
<tr>
<td>Image of &quot;slob&quot; hunter or &quot;Rambo&quot; attitude is a &quot;turn-off&quot;</td>
<td>5</td>
</tr>
<tr>
<td>Lack of information</td>
<td>5</td>
</tr>
<tr>
<td>Increased urbanization of society</td>
<td>4</td>
</tr>
<tr>
<td>Lack of time</td>
<td>4</td>
</tr>
<tr>
<td>Seen as dangerous</td>
<td>4</td>
</tr>
<tr>
<td>Single parent families</td>
<td>4</td>
</tr>
<tr>
<td>Early childhood conditioning</td>
<td>3</td>
</tr>
<tr>
<td>Fear of looking stupid</td>
<td>3</td>
</tr>
<tr>
<td>Co-ed facility problems</td>
<td>3</td>
</tr>
<tr>
<td>Lack of place to go</td>
<td>3</td>
</tr>
<tr>
<td>Isolation of being only female</td>
<td>2</td>
</tr>
<tr>
<td>Tradition</td>
<td>2</td>
</tr>
<tr>
<td>Fear of guns</td>
<td>1</td>
</tr>
<tr>
<td>Attitude of agency personnel</td>
<td>1</td>
</tr>
<tr>
<td>Attitude toward game vs. packaged meat</td>
<td>1</td>
</tr>
<tr>
<td>Vanity</td>
<td>1</td>
</tr>
</tbody>
</table>

*Number of groups that identified each barrier
Recommendations generated by focus groups at the Breaking Down the Barriers workshop led to the development of the "Becoming an Outdoors-Woman" program. "Becoming an Outdoors-Woman" (BOW), a weekend of outdoor skills, is a program primarily aimed at women, but is open to anyone 18 years of age or older. The focus of the workshops is learning outdoor skills in a non-threatening atmosphere under the direction of patient, enthusiastic instructors. The curriculum of the clinics is divided equally between hunting- and shooting-related, fishing, and non-harvest activities. The learning is done in an atmosphere that encourages camaraderie and fun (Thomas, 1995).

The first of its kind anywhere in the nation, the initial "Becoming an Outdoors-Woman" clinic was held in Wisconsin in September, 1991 (Thomas, 1992). During 1992, Nebraska and Wisconsin conducted workshops. In 1993, clinics were sponsored by Wisconsin, Oregon/Washington, Nebraska, Arkansas, and Texas. The geographic range of the BOW program expanded exponentially in 1994, with workshops offered in Arkansas, California, Colorado, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Missouri, Montana, Nebraska, New York, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Wisconsin, and Manitoba. Some states held more than one clinic.

Workshops were scheduled from January through October in 1995, with several states offering multiple workshops. The following states/provinces were involved in 1995: Alabama, Alaska, Arkansas, California, Colorado, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan,
Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Wisconsin, Manitoba and Saskatchewan.

Over the past five years, the BOW program has been sponsored nationally by the University of Wisconsin-Stevens-Point, National Rifle Association, National Shooting Sports Foundation, Safari Club International, SCI Nebraska Chapter, Archery Manufacturers Organization, Wildlife Forever, North American Hunting and Fishing Clubs, American Sportfishing Association, Gander Mountain, and Cabela’s. In addition, each state offering the program provides sponsorship through its department of natural resources or wildlife/fisheries and many local organizations.

Training sessions for state agency personnel were conducted at several clinics, including the 1992 and 1993 Wisconsin clinics and the 1992 Nebraska workshop. These training sessions were intended to give agency personnel the background they need to institute the workshops in their own state (Thomas et al., 1993). These agency training opportunities, and sessions held in 1994 and 1995, have made it possible for the program to spread to most of the United States and several Canadian provinces.

Literature Review

Reasons for Lower Involvement by Women in Outdoor Activities

The number of women involved in outdoor activities is disproportionately low compared to their numbers in the general population. According to a 1991 U.S. Fish
and Wildlife Service study (op. cit.), about ten percent of hunters and thirty percent of anglers are women. Much of the leisure-based literature investigating this lower involvement specifically discusses hunting, and this has been extrapolated to include other outdoor skills.

The age of first activity was considered a measure of socialization toward that activity (O’Leary et al., 1987). Over 80 percent of men have hunted by the time they are 18 years old (ibid.), while women tend to have their first hunting experience as adults.

Cultural barriers and traditions separate women from the hunting experience. Women reported a lack of partners, family commitments, shyness, lack of transport, and physical inability as limits to their outdoor involvement (Henderson et al., 1990). Jackson (1990) called the gender roles expected of women an antecedent restraint on their activities, and added personal capacities, personality, and socialization to the list. Discrimination has been demonstrated toward women in the field of outdoor recreation, especially in attitudes about inherent differences in roles and abilities between the sexes (Theobald, 1978).

Many barriers to outdoor recreation are social-based fears rather than physical ones. Fear-enhancing components included non-acceptance by the group, not being able to keep up, letting one’s self down, and making wrong decisions (Ewert, 1988). Matthews (1995a) listed the need for social support and role models by urban anglers as two of the barriers that kept them from fishing.
Women have not usually been taught the necessary skills to hunt (Rusch, 1986). In general, hunting is not the leisure activity of choice for women. Ditton et al. (1992) suggested that leisure preference was related to prior activity, and Shaw (1985) reported a correlation of sex to behavior in day-to-day activities. Leisure involvement in outdoor activities, however, can become an empowerment and a release from gender roles (Henderson, 1990). Once attempted, hunting can provide opportunities for spousal interaction, family participation, and skills development (Beuchert, 1994).

Importance of Participation by Women in Outdoor Activities

A prevailing theme for the future of outdoor activities revolved around getting children started early. Hadley (1992) contended that it is the responsibility of women hunters to lead the effort to teach future generations. It was suggested that if children are not exposed to hunting or fishing, they are less likely to be hunters or anglers as adults (Stange, 1992; Swan, 1994). Developing a new, diverse constituent base to support hunting and fishing may be needed to avoid the loss of the resource (Matthews, 1995b).

Concern was voiced about developing specific education strategies for women. As women adopt hunting as a leisure activity, they need role models and an education program that brings their knowledge base up to that of the traditional hunter (Jackson et al., 1988). Women gain leisure fringe benefits and social contacts through hunting (King, 1983; Thomas, 1986). Innovative programs such as the Women’s Shooting
Sports Foundation and its Ladies’ Charity Classic are intended to facilitate participation of women in shooting sports (NSSF, 1995).

**Economic Benefit**

The economic benefit of all hunting licenses and related spinoff business is $12.4 billion (IAFWA, 1993). But hunter populations are down as much as 14 percent over the past ten years, and Heberlein (1992) predicts the end of hunting in the early 21st century. Women, the fastest growing population of hunters, are a potential new public for fish and game agencies and retailers to target (Geer, 1993; Rusch, op. cit.).

**Attitude Changes**

Some experts suggest that death-dealing activities such as war and hunting fell to men while women were involved with life-giving activities. Gendered attitudes toward death-dealing activities may have evolved from historical time (King, op. cit.).

However, women’s roles have shifted from domestic to a broader definition to include traditionally male activities. The gap in role expectations is narrowing, and information needs to be provided for this constituency (Snepenger and Ditton, 1985). After their children leave home, women are ready to experience a new leisure outlet (Witt and Goodale, 1981), which may lead to attitude changes toward hunting.

Women are considered to be more open to the information about hunting and the environment that is available from organizations such as the National Wildlife Federation, National Shooting Sports Foundation, and Project WILD. If taught about hunting, women can be a significant force in changing attitudes about hunting (Stange,
Exposure to individuals with different views in a non-threatening atmosphere is conducive to changing attitudes. The positive attitude and behavior of instructors in a situation that women otherwise perceive as intimidating is crucial to determining if apprehensions are reinforced or eliminated (Speer, 1994). Matthews and Riley (1994) advocate an interactive approach as holding the most promise for supporting good outdoor behavior.

Study Problem

In 1991, Dr. Christine Thomas developed the "Becoming an Outdoors-Woman" workshops. This weekend of outdoor skills taught a balanced program of hunting/shooting, fishing, and non-harvest activities. The target audience was adult women, and every attempt was made to provide learning experiences in an enjoyable, comfortable, non-threatening atmosphere. Conditions were created to foster immediate success (Thomas, 1995).

Matthews (1995b) listed five elements for a program that makes an impact: offers a threshold experience--one that opens doors and breaks down barriers, provides equipment, shows places to fish and hunt, trains and supports volunteers, creates social support. He submitted that the BOW program provides all five elements to successfully support women in developing outdoor skills and interests.

The enthusiasm generated by the first "Becoming an Outdoors-Woman" workshops was gratifying to organizers. However, preparation for each workshop
took months of staff time: locating a facility, determining classes, contracting with instructors, preparing publicity, accepting registrations, and actually presenting the workshop. The clinics were intended to be self-sustaining, with registrations from participants covering costs of the workshop. Most state agencies, however, had to add the responsibility for coordinating a BOW workshop to the duties of a staff person already working with hunter education or with information and education.

Perry Olson, chair of the Communications Committee of the International Association of Fish and Wildlife Agencies (IAFWA), sent a survey to state directors of resource agencies, asking whether they supported involvement in the "Becoming an Outdoors-Woman" program. In his summary of that survey, Olson (1994) determined that 98 percent of the respondents were familiar with the BOW program and that 74 percent intended to implement the workshops in their state. IAFWA endorsed the project nationwide at the 1994 North American Wildlife and Natural Resources Conference.

Several sporting groups and businesses had partnered with "Becoming an Outdoors-Woman" as national sponsors in 1992 and 1993. There was interest on the part of those sponsors as to whether the clinics actually accomplished what they intended.

Background research (Thomas, 1990) indicates that prior to the first "Becoming an Outdoors-Woman" workshop in 1991 there were no other outdoor skills workshops offered in the United States that included shooting, fishing, and non-
harvest activities and that were targeted specifically to women. There were no similar programs to use to evaluate the impact of such a clinic.

A survey of BOW participants was needed indicate whether the workshops actually had any effect on participation in outdoor activities. The workshops were intended to foster lifetime enjoyment of outdoor activities. It was speculated that participants would continue activities through sports clubs, friendships generated by the clinics, and empowerment to persist on their own. A survey of participants was intended to indicate whether participants continued outdoor activities. Other information to be gathered in the survey included demographic background data, potential attitude changes toward outdoor activities by participants, and information about purchases of outdoor equipment and clothing.
METHODS

It was the hypothesis of this research that attending a "Becoming an Outdoors-Woman" (BOW) workshop would encourage participants to continue with outdoor activities at a level that they would not have attempted without the clinic.

In order to determine whether this hypothesis was valid, a survey was developed to mail to all persons who had participated in a BOW workshop in 1991, 1992, and 1993.

Survey Objectives

The first objective of the survey was to determine whether BOW workshop participants increased or decreased their use of learned outdoor skills during the year after they attended the clinic.

A second objective of the survey was to examine whether workshop participants' attitudes toward shooting sports, angling, and other outdoor activities had become more positive or negative since attending the workshops.

The third question raised was to ask if participants had purchased or received outdoor equipment and clothing for themselves since attending the workshops. In addition, the survey would inquire whether the equipment was of a type that they saw demonstrated at the workshops.

The summarized survey information was expected to be valuable to agencies that offer programs with women as their audience, to sponsors and conservation partners who collaborate on such projects, and to sporting goods retailers who can capitalize on a new market. With women an increasingly targeted segment of the
outdoor market, sporting goods manufacturers are interested in what influence the workshops have in the purchase of outdoor equipment.

Survey Development

Questions used in the participant survey (Appendix 1) were developed to address the three objectives. Sponsors and contributors were asked for input into the survey. They were asked to give either specific questions they would like to have answered or for general information that would be useful to them. A preliminary survey was given to the sponsors, graduate committee, several workshop attendees, and two professionals who had experience with surveys. The questions were then revised.

Dillman (1978) suggests that a cover letter telling respondents they are contributing to an important social issue will increase responses. A cover letter was sent with each survey, informing the addressee that results of the survey should help expand programming and marketing for women’s outdoor activities.

The survey instrument was kept to four 8-1/2 x 11 sheets for printing on an 11 x 17 sheet, reducing the likelihood that pages were lost or overlooked by respondents. Although surveys were anonymous, they were coded by region so that additional research could be conducted if desired. A follow-up postcard, as recommended by Dillman (op. cit.), was mailed to all participants three weeks following the survey mailing, thanking them for responding or reminding them to do so.

For questions quantifying degree of change in activities or attitudes, a 5-point Likert scale was used (Weisberg et al., 1989). Depending on the question, the scale
ranged from High Increase to Marked Decrease or from Strongly Agree to Strongly Disagree. Other questions simply required that the respondent check a box or leave it blank.

There was a possibility that women who had an interest in outdoor activities would respond in the same way as BOW workshop participants. To give a basis for comparison, and to determine whether attendance at a workshop made a difference, a control survey (Appendix 2) was developed.

The questions asked on the control survey were similar to those asked on the participant survey. However, where participants were asked to respond in regard to "the year following a BOW workshop," the control group was asked to respond in reference to "during the past year." Also, questions about sessions and equipment demonstrations at a workshop were deleted from the control survey.

Survey Dissemination

In fall of 1993, surveys were sent to all participants in the 1991 Wisconsin workshop and the 1992 workshops in Wisconsin and Nebraska. In fall 1994, surveys were sent to all participants from the 1993 workshops in Arkansas, Nebraska, Oregon, Texas, and Wisconsin. The total number of surveys sent was 796. Subtracting the surveys that were returned with forwarding addresses expired, the total number of surveys sent was 761. Four hundred forty-nine (59%) usable surveys were returned. In each of the two years, a follow-up postcard was sent about three weeks after the survey was sent. The additional response following the postcard was negligible.
Four hundred control surveys were sent in fall of 1993. These surveys were sent to individuals who had expressed an interest in the program, so were on the mailing lists, but who had not attended a workshop. Obviously, this was not a random sample of the general population. Instead, it was a population of people who were likely to be interested in outdoor skills. This survey was intended to show whether a person interested in learning outdoor skills increased participation even if she did not attend a workshop. Surveys were sent to individuals in Nebraska, Oregon, Washington, Wisconsin, and Texas. Two hundred four (53%) usable surveys were returned.

Analysis

Results were compiled by percentage of respondents to each survey. Data gathered were compiled using Paradox data base. Responses were coded so that data could be analyzed regionally in the future if desired.

For purposes of this research, effectiveness of the workshops was considered to be demonstrated by any increase in activities and any positive change in attitude. It was assumed that the higher the change reported, the more effect the workshop had on the respondent. The survey responses were quantifiable. In addition, respondents were encouraged to submit personal input in the form of comments.

The participant survey information was compared with the control survey results to see whether "Becoming an Outdoors-Woman" workshop participants demonstrated a higher degree of activity and more positive attitude than the control population.
Demographic data compiled from the survey are presented graphically. Results of other types of questions are presented in tables. All data are shown as percentage of respondents. Significant difference was determined through chi square analysis (Appendix 3).

Considerations

A potential source of bias was in who exactly responded to the surveys. Were those most likely to respond those who had continued participation or changed attitudes? Did participants only respond to the survey if they were positive about outdoor activities? Did control individuals not attend a workshop because they were less likely to continue activities? Were control individuals already highly active and therefore did not have a marked change in activities or attitudes? Bias might also occur through forgetfulness or misrepresenting one’s activities (Doby, 1967).

Most workshop participants were surveyed one year after the program. However, one group was surveyed two years after a workshop. In addition, some participants were repeat students. Answers from these participants might have these implications: People who attended a workshop more than one year ago may have been active the first year after the program but have lower outdoor participation at this date. Repeat students may have higher-than-average responses than one-time participants, skewing the data higher.

It was assumed that in ranking attitudes and activities, the respondents were subjective. An individual’s enthusiasm or disinterest could give a ranking higher or lower than another person rating the same level of activity. Nevertheless, the
responses were collated and presented as they were given, in the best attempt to keep measurement consistent.
RESULTS

Demographics

"Becoming an Outdoors-Woman" (BOW) workshop participants were asked what year and at which location they attended a workshop (Table 2). There was no significant difference in overall answers by year or region.

<table>
<thead>
<tr>
<th>Location</th>
<th>1991</th>
<th>1992</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td>15</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Oregon/Washington</td>
<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>13</td>
<td>10</td>
<td>11</td>
</tr>
</tbody>
</table>

The control survey was mailed to names on the mailing lists for workshops in Nebraska, Wisconsin, Texas, and Oregon/Washington. Table 3 shows the distribution of the control respondents.

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage of respondents (n=204)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebraska</td>
<td>12</td>
</tr>
<tr>
<td>Oregon/Washington</td>
<td>28</td>
</tr>
<tr>
<td>Texas</td>
<td>30</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>30</td>
</tr>
</tbody>
</table>
Demographic information was asked from participants and the control group. The graphs in Figures 1 to 6 serve to show how very similar the two groups of respondents were. Virtually the only difference was attendance at a BOW workshop. For purposes of this research, workshop participants are a representative sample of women on the mailing list. There was no significant difference between the two populations of respondents.

A couple of notable demographics surfaced. More than 65 percent of the survey respondents in both groups were childless or had adult children (Figure 4). This may mean that these women are more likely to have time to be involved with outdoor activities. Also, over 90 percent of the two groups of respondents were Caucasian (Figure 3). This does not reflect the ethnicity of women in the country overall; perhaps an effort needs to be made to target the minority populations for attendance at BOW workshops.

Many women who responded to the control survey were interested in attending a BOW workshop, and wanted to stay on the mailing list.
Figure 1. Age of Respondents

![Bar chart showing age distribution of participants and control group]

- **Participants n=449**
- **Control n=204**
Figure 2. Marital Status of Respondents

KEY

A = Never married
B = Married
C = Separated
D = Divorced
E = Widowed

Participant n=449  Control n=204
Figure 3. Ethnicity of Respondents

KEY

A = Black
B = Asian
C = Native American
D = Hispanic
E = White/Other

Participant n=449  Control n=204
Figure 4. Children of Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Participant n=449</th>
<th>Control n=204</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Adult</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>Adult Children</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Young</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Young</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Young</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Young</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Figure 5. Occupation of Respondents

KEY

A = Homemaker
B = Clerical
C = Sales
D = Service
E = Technical
F = Professional
G = Retired
H = Other
I = No response
Figure 6. Household Income of Respondents

KEY

A = $0-14,999
B = $15-24,999
C = $25-34,999
D = $35-44,999
E = $45,000 or more
F = No response
Figure 7. Education of Respondents

KEY

A = Less than high school
B = High school/GED
C = Some college
D = College degree
E = Advanced degree
F = No response
Activities

If attending a "Becoming an Outdoors-Woman" workshop made a difference in activities and attitudes, perhaps attendance at another educational program might have an equal effect. Therefore, the question was asked of the control group, had they attended an educational program other than a BOW workshop (Table 4). There was no appreciable difference between the answers of those who had attended workshops such as hunter education or Project WILD and other control respondents. That is, other seminars did not appear to increase participation or change attitudes in the same way as a BOW workshop did.

Table 4. Attended other educational program. (Percentage of control respondents, n=204)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>No</td>
<td>76</td>
</tr>
</tbody>
</table>

Both the workshop participants and the control group were asked to indicate change in level in outdoor activities (Table 5). Workshop participants were asked to relate the change to the year following workshop attendance; control respondents were asked about changes in the past year. Significant difference was shown in all but one activity associated with classes taught at BOW workshops, hunting with dogs (Appendix 3). Overall, an average of 18 percent of participants showed an increase in these activities. Less than 2 percent of participant respondents showed a decrease. The control group showed an overall increase average of 12 percent, and a decrease of 8 percent.
Table 5. Change in level of participation in outdoor activities. (Page 1 of 2)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage of respondents</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participants (n=449)</td>
<td>Control (n=204)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>HI</td>
<td>I</td>
<td>NC</td>
<td>D</td>
<td>MD</td>
<td>NR</td>
<td>HI</td>
<td>I</td>
<td>NC</td>
<td>D</td>
<td>MD</td>
</tr>
<tr>
<td>General fishing</td>
<td>4</td>
<td>24</td>
<td>48</td>
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<td>5</td>
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<tr>
<td>Fly fishing</td>
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<td>12</td>
<td>26</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>60</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Fly tying</td>
<td>3</td>
<td>4</td>
<td>25</td>
<td>1</td>
<td>&lt;1</td>
<td>67</td>
<td>1</td>
<td>2</td>
<td>25</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Target shotgun</td>
<td>6</td>
<td>18</td>
<td>24</td>
<td>1</td>
<td>&lt;1</td>
<td>51</td>
<td>3</td>
<td>12</td>
<td>23</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Target rifle/handgun</td>
<td>5</td>
<td>14</td>
<td>30</td>
<td>2</td>
<td>&lt;1</td>
<td>49</td>
<td>5</td>
<td>12</td>
<td>26</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Target muzzleloader</td>
<td>1</td>
<td>3</td>
<td>24</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>72</td>
<td>0</td>
<td>1</td>
<td>25</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Hunting shotgun</td>
<td>5</td>
<td>12</td>
<td>27</td>
<td>1</td>
<td>1</td>
<td>54</td>
<td>4</td>
<td>7</td>
<td>26</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Hunting rifle</td>
<td>5</td>
<td>9</td>
<td>30</td>
<td>0</td>
<td>&lt;1</td>
<td>56</td>
<td>2</td>
<td>4</td>
<td>28</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Hunting muzzleloader</td>
<td>1</td>
<td>2</td>
<td>24</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>73</td>
<td>1</td>
<td>1</td>
<td>24</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Turkey hunting</td>
<td>4</td>
<td>5</td>
<td>25</td>
<td>0</td>
<td>1</td>
<td>66</td>
<td>1</td>
<td>1</td>
<td>26</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Key: HI = high increase  D = decrease  
     I = increase      MD = marked decrease  
     NC = no change   NR = no response
Table 5. Change in level of participation in outdoor activities. (CONTINUED--Page 2 of 2)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Participants (n=449)</th>
<th>Control (n=204)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HI</td>
<td>I</td>
</tr>
<tr>
<td>Hunting w/dogs</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Target archery</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Bowhunting</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Camping</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Outdoor cooking</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Orienteering</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Hiking</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>Nature photography</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Canoeing</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Taking children outdoors</td>
<td>12</td>
<td>16</td>
</tr>
</tbody>
</table>

Key: HI = high increase  D = decrease
     I = increase       MD = marked decrease
     NC = no change    NR = no response
The percentage of increase in some activities was almost certainly attributable to the workshops. For example, fly fishing by participants, an activity not likely to be undertaken by women, increased 14 percent as opposed to a 4 percent increase by the control group. One participant respondent informed us, "I made my own fly rod." Shotgun target shooting and hunting, rifle hunting, and bow target shooting and hunting all showed strong increases by participants. One respondent noted, "I'm looking forward to opening day of deer season." Turkey hunting, a somewhat specialized sport, is another example of a class that had an effect on participant respondents. While only 2 percent of the control group showed an increase, 9 percent of the participants increased this activity, with one writing: "I shot my first turkey last fall."

Other comments returned with the surveys speak to more activities the participants undertook: "I've purchased two Irish Water Spaniels that I have had great fun training." "Bought my first fishing license." "Started taking camping trips for women only...the ladies were so impressed with the peach cobbler I made in the dutch oven." "Learned the uni knot which I use all the time."

Perhaps the most notable increase came in orienteering, a growing sport that may be unfamiliar to novice outdoor enthusiasts. While 8 percent of the control group increased this activity, a sizable 27 percent of participants reported an increase in orienteering.

An important point to consider in interpreting these data is that each participant only attended four sessions at a workshop, not all 20 activities listed.
Some activities were not offered at every workshop, and some classes rarely filled enrollment. Therefore, those 30 women who reported an increase in muzzleloader activities, for example, may represent a low percentage of respondents; but include a high percentage of the women who actually enrolled in muzzleloading.

Not only did the workshop participants relate a higher increase in activities, they reported a lower decrease--less than 4 percent in any listed activity. The control group, on the other hand, showed decreases of 17 percent and 15 percent even in camping and hiking; indicating that BOW workshops also prevent women from dropping out of non-harvest activities.

Respondents were asked, if they had a decrease in activities, what was the reason. Reasons given for not participating in or decreasing outdoor activities were mainly time constraints and moving from where friends were.

Sixty-one percent of participant respondents said the workshop was Important or Essential in increasing outdoor activities (Table 6). Comments received illustrated this response: "As a novice in all areas, workshops gave me information so I'll know where to begin and increase my areas of interest." "I left the workshop all excited to use what I learned." "You’ll never know how much I got from these seminars." "It was one of the best experiences of my life." "The shotgun experience was wonderful and gave me the confidence to purchase a new shotgun and pursue certification as a 4-H shooting sports coach." "Started fly fishing and target archery since workshop--would not have done so without attending Outdoors-Woman."
Table 6. Importance of workshop in increasing participation. (Percentage of participant respondents, n=449)

<table>
<thead>
<tr>
<th>Importance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential</td>
<td>19</td>
</tr>
<tr>
<td>Important</td>
<td>42</td>
</tr>
<tr>
<td>May have helped a little</td>
<td>19</td>
</tr>
<tr>
<td>Didn't make me participate more</td>
<td>5</td>
</tr>
<tr>
<td>No response</td>
<td>15</td>
</tr>
</tbody>
</table>

Only about a quarter of either group said they had joined any conservation or sporting groups during the past year (Table 7). Those who did answer affirmatively had joined groups ranging from National Rifle Association to the Nature Conservancy.

Table 7. Joined a sporting/conservation group in the past year/since attending workshop.

<table>
<thead>
<tr>
<th></th>
<th>Percentage of respondents.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participant (n=449)</td>
</tr>
<tr>
<td>No</td>
<td>73</td>
</tr>
<tr>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>No response</td>
<td>3</td>
</tr>
</tbody>
</table>

The women did seem interested in opportunities for joining sporting groups, if such appeared to be available to them: "Wish there were more groups around here to join." "[didn't join] because of job obligations--interest was there." "Since the workshop, I have joined the Brooklyn Sportsmens Club and started an all women's trap team."
The low percentage of positive responses to this question is somewhat puzzling. After the first Wisconsin "Becoming an Outdoors-Woman" workshop in 1991, 38 participants joined the Wisconsin Sportswomen's Club within weeks of attending the program. That group has since grown to several chapters across the state and several hundred members. The TomBoys Club, a sponsor of the Oregon clinic, undoubtedly gained new members following the 1993 workshop. Because only a few participant respondents listed those organizations, it is unclear whether other club members were non-respondents or simply forgot about having joined.

Marketing

Sponsors and sporting goods retailers were very interested in the marketing component of the surveys. Knowing whether a women's market is generated by the "Becoming an Outdoors-Woman" workshop may make a difference whether an organization or business is interested in supporting such a workshop.

An overwhelming amount of outdoor clothing and equipment was obtained by both groups (Table 8). Eighty-seven percent of the participant respondents and 83 percent of the control group said they bought something. Items bought and percentages of each group were very similar. The only significant difference, probably directly attributable to workshops, was Dutch ovens--a class taught at the workshops. Fishing gear, shooting/hunting gear, and camping equipment are about equally represented in purchases.
Table 8. Outdoor equipment/clothing acquired for self.

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage of respondents.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participant (n=449)</td>
<td>Control (n=204)</td>
</tr>
<tr>
<td>Firearm</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Rifle</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Shotgun</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Pistol</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Muzzleloader</td>
<td>2</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Ammunition</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>Hunting accessories</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>Fishing rod</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>Other fishing gear</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>Bow</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Bowhunting equipment</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Camping gear</td>
<td>25</td>
<td>31</td>
</tr>
<tr>
<td>Compass</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Canoe</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Dutch oven</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Outdoor clothes</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Hunting/fishing apparel</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>Other outdoor clothing</td>
<td>43</td>
<td>53</td>
</tr>
<tr>
<td>No response</td>
<td>13</td>
<td>17</td>
</tr>
</tbody>
</table>
Both groups purchased equipment or clothing at similar outlets, beginning with the local sporting goods outlet (Table 9). Reasons why they obtained a particular type were also similar, including quality, cost, and fit (Table 10).

<table>
<thead>
<tr>
<th>Table 9. Where equipment/clothing was purchased.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of respondents (will total more than 100%).</td>
</tr>
<tr>
<td>Participant (n=449)</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Local sporting dealer</td>
</tr>
<tr>
<td>Mail order catalog</td>
</tr>
<tr>
<td>Department store</td>
</tr>
<tr>
<td>Sports show</td>
</tr>
<tr>
<td>Direct from manufacturer</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 10. Why particular equipment/clothing was obtained.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of respondents (will total more than 100%).</td>
</tr>
<tr>
<td>Participant (n=449)</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Demonstrated at workshop</td>
</tr>
<tr>
<td>Made/sold by sponsor</td>
</tr>
<tr>
<td>Quality</td>
</tr>
<tr>
<td>Cost</td>
</tr>
<tr>
<td>Color/aesthetic appeal</td>
</tr>
<tr>
<td>Fit size/ability</td>
</tr>
<tr>
<td>Recommended by friend/relative</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>
It is notable that "fit size and ability" was a highly-cited factor in purchases, and a factor that probably affects many women. Ill-fitting equipment and clothing was cited as one of the barriers to participation by women in hunting and angling (Thomas and Peterson, op. cit.). Women are interested in having clothing that fits their body configuration, both for comfort and safety. And equipment needs to fit the generally-shorter arms and potentially less-developed muscles of many women, leading women to look for lighter-weight, smaller-sized firearms, bows, and canoe paddles to fit their size and ability.

Purchases by workshop participants did appear to be influenced by equipment demonstrated at a workshop (Tables 11 and 12). Sixty-four percent of participants said that some or all of the equipment and clothing they bought was the same brand as demonstrated at a workshop, and 72 percent said that demonstration influenced the purchase.

<table>
<thead>
<tr>
<th>Table 11. Equipment/clothing the same as seen at workshop. (Participant respondents, n=449)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
</tr>
<tr>
<td>Some</td>
</tr>
<tr>
<td>None</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>

From the comments enclosed with surveys, workshop participants enjoyed the opportunity to see or try out equipment and clothing made for women: "I like to see hands-on that things work and how they work before buying. Getting to use a
product helps to decide what I purchase." "Wish I had bought the brand of equipment demonstrated."

Table 12. Purchase influenced by demonstration at workshop. (Participant respondents, n=449)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely</td>
<td>33</td>
</tr>
<tr>
<td>Somewhat</td>
<td>39</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
</tr>
<tr>
<td>No response</td>
<td>15</td>
</tr>
</tbody>
</table>

Participants were also likely to try to purchase equipment from a workshop sponsor or contributor (Tables 13 and 14). Fifty-six percent of participant respondents said they did acquire clothing or equipment from a sponsor or contributor of the "Becoming an Outdoors-Woman" program, and an impressive 82 percent said they would make an attempt to buy from a sponsor or contributor.

Table 13. Purchased from sponsor or contributor. (Participant respondents, n=449)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>9</td>
</tr>
<tr>
<td>Some</td>
<td>47</td>
</tr>
<tr>
<td>None</td>
<td>28</td>
</tr>
<tr>
<td>No response</td>
<td>16</td>
</tr>
</tbody>
</table>
Table 14. Would try to purchase from a sponsor or contributor. (Participant respondents, n=449)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely</td>
<td>36</td>
</tr>
<tr>
<td>Somewhat</td>
<td>46</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
</tr>
<tr>
<td>No response</td>
<td>12</td>
</tr>
</tbody>
</table>

Several participants bought equipment right at the workshop, and from the dealer/teachers who were there. Cost of some sponsors’ wares seemed to be a deterrent to purchases.

Although some respondents checked nearly every item listed, others did little purchasing: "At my age (73 years) I have all the hunting, fishing, and camping equipment I need."

Attitudes

Both groups surveyed were asked about their changes in attitudes toward various outdoor activities, either during the year following a workshop (participants) or, for the control group, during the past year (Table 15). The participants were on average significantly more positive than the control group. An especially notable effect of the workshops was in the area of the shooting sports. Sixty-four percent of participant respondents said they feel more positive toward the shooting sports, whereas only 47 percent of the control group responded positively. In addition, only 5 percent of the participants responded that they felt more negative toward shooting sports, while an appreciable 21 percent of the control group responded negatively. In
a related question, 86 percent of participants said they were likely to hunt or fish in the future, with 76 percent of the control group giving a positive response.

It was believed that exposure to the outdoor skills would awaken an appreciation of nature and conservation in participants. It was encouraging to note that 76 percent of participants responded that they were now more interested in environmental protection. Only 51 percent of the control group gave a positive response.

For most survey statements, the attitudes of the participant and control respondents were significantly different (Appendix 3). However, both groups were adamant about one thing: They would use their outdoors skills more in the future!
Table 15. Attitudes changes during the past year (for participants, during the year following attending a workshop).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage of respondents.</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participants (n=449)</td>
<td>Control (n=204)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
<td>NR</td>
<td>SA</td>
<td>A</td>
<td>N</td>
<td>D</td>
<td>SD</td>
<td>NR</td>
<td></td>
</tr>
<tr>
<td>I am more interested in outdoor activities.</td>
<td>39</td>
<td>43</td>
<td>14</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>36</td>
<td>39</td>
<td>18</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>I expect to continue using outdoor skills I learned.</td>
<td>54</td>
<td>39</td>
<td>5</td>
<td>&lt;1</td>
<td>0</td>
<td>2</td>
<td>49</td>
<td>37</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>I feel more positive toward the shooting sports.</td>
<td>35</td>
<td>29</td>
<td>25</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>22</td>
<td>25</td>
<td>27</td>
<td>11</td>
<td>10</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>I feel more positive toward fishing.</td>
<td>27</td>
<td>39</td>
<td>28</td>
<td>2</td>
<td>&lt;1</td>
<td>4</td>
<td>18</td>
<td>35</td>
<td>35</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>I feel more positive toward camping, canoeing, etc.</td>
<td>33</td>
<td>46</td>
<td>16</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>30</td>
<td>41</td>
<td>24</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>I am likely to hunt or fish in the future.</td>
<td>55</td>
<td>31</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>42</td>
<td>33</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>I am likely to camp, canoe, etc. in the future.</td>
<td>35</td>
<td>34</td>
<td>5</td>
<td>1</td>
<td>&lt;1</td>
<td>3</td>
<td>52</td>
<td>36</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>I am less intimidated about trying outdoor activities.</td>
<td>36</td>
<td>40</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>29</td>
<td>38</td>
<td>25</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>I am more interested in environmental protection.</td>
<td>32</td>
<td>44</td>
<td>20</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>30</td>
<td>21</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>I have not used skills this year.</td>
<td>3</td>
<td>8</td>
<td>13</td>
<td>33</td>
<td>39</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>9</td>
<td>26</td>
<td>48</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>I do not expect to use what I learned in the future.</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>27</td>
<td>63</td>
<td>4</td>
<td>&lt;1</td>
<td>2</td>
<td>4</td>
<td>20</td>
<td>71</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Key: SA = strongly agree  A = agree  N = neutral  D = disagree  SD = strongly disagree  NR = no response
Questions about attitudes, and the question of what was gained by attending the workshop (Table 16) generated pages of comments from respondents.

<table>
<thead>
<tr>
<th>Table 16. What was gained from attending a workshop. (Participant respondents, n=449. Numbers will total more than 100%.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased skill level</td>
</tr>
<tr>
<td>Chance to practice skill</td>
</tr>
<tr>
<td>Became familiar with equipment</td>
</tr>
<tr>
<td>Social contact w/like minded individuals</td>
</tr>
<tr>
<td>Met someone to hunt, fish, hike with</td>
</tr>
<tr>
<td>Reassurance I’m not unusual</td>
</tr>
<tr>
<td>Greater appreciation for the environment</td>
</tr>
<tr>
<td>Didn’t get much out of workshop</td>
</tr>
<tr>
<td>Other responses</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>

"Gained lots of self confidence--and the knowledge that I could survive without my husband for 3 days." "Learned new tips and got the adrenalin flowing!" "There is always something new to be learned."

An elderly participant who attended with her daughter wrote: "It was a wonderful experience for both of us and I will treasure the memories for many years."

Although eighty percent of participants said they enjoyed the social contact of the workshops, almost no one said they met someone to hunt and fish with.
Comments relating to that: "Wish I could meet a few more women to hunt with."
"Do you have any information on how to organize [a women's sporting club]?"

We could only hope for the kind of impact that this participant writes about:
"It has changed my mind about firearms and hunters even though I haven't hunted
since the workshop. It has made me a better conversationalist with sportspeople; I
am truly interested. It has made me a better consumer; I know what's essential and
that it's OK to ask questions. It has made me more aware of the former outdoor
activities of the residents at the nursing home where I work and their present needs
for the outdoors. It has made me more optimistic about the environment. I
appreciate all of my state much more as the workshop has shown me what the state
has to offer."

The four workshop sessions attended were ranked as to what the participants
liked best (Table 17). Overall, shooting-related activities ranked highest. This may
be because there were the most barriers to doing these activities, and the rewards for
being successful seem high. Also, classes were designed to be hands on. There was
a good deal of action with the shooting classes. For many participants, it was the
first time they had handled a firearm. One respondent wrote: "I had wanted to try
shooting for years and finally got to."
Table 17. Ranked sessions attended at workshop. (Participant respondents, n=449. Each column equals 100%)

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shooting/hunting</td>
<td>57</td>
<td>36</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>Fishing</td>
<td>21</td>
<td>22</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Non-harvest</td>
<td>17</td>
<td>36</td>
<td>36</td>
<td>30</td>
</tr>
<tr>
<td>No response</td>
<td>5</td>
<td>6</td>
<td>14</td>
<td>34</td>
</tr>
</tbody>
</table>

One writer summarized the comments of many participants: "For me, the best thing about it was the feeling of freedom it gave me to try something new. I didn't mind looking silly...surrounded by women who were very supportive. I think this type of workshop would be an excellent way to focus women's attention on env/conservation issues. In addition, the workshop was just a heck of a lot of fun."
DISCUSSION

It was hypothesized that participation in a "Becoming an Outdoors-Woman" (BOW) workshop would increase participation in outdoor skills. It was also expected that attitudes toward outdoor activities would improve and purchases of outdoor equipment would increase. It has been documented that the "Becoming an Outdoors-Woman" programs are successful training programs (Thomas and Peterson, op. cit.), but it was necessary to determine if the hypotheses of this study were valid.

Attendance at a BOW workshop had a positive influence on the factors surveyed. Participants were likely to increase their level of participation in activities associated with what they learned at the workshops. In many cases, they discovered an interest and ability in an activity they might have otherwise never considered (Lueck, 1994). In addition, they tended to continue with these activities, with almost no dropout rate. The control group increased participation less than BOW participants, and they had a higher rate of decrease in outdoor activities.

A year after taking part in a BOW workshop, participants may not yet have recognized some benefits of attending. For example, only nine percent of respondents said they met someone to hunt or fish with. However, it may be that they simply did not connect with someone right at that point in time. If, in the future, they plan a women’s camp-out or fishing trip or hunting group, there is the possibility that they will contact women they met at the BOW clinic. They also may have expanded those connections by joining a group such as the Wisconsin Sportswomen’s Club, which held a group hunt for its members in 1991.
Results of the survey of attitudes followed the same pattern as activities, with participants tending to be more positive toward all outdoor activities than were the control group. However, there were similarities in answers to some questions: Both groups intended to use outdoor skills more in the future than they had during the past year.

There is the possibility that more-experienced women attended the first "Becoming an Outdoors-Woman" workshops in any state, intrigued by the opportunity to meet other women with the same interests and the chance to be in on the ground floor of something new. More non-traditional women may tend to attend the clinics in subsequent years. Women who are repeat attendees often bring a friend or two with them. These friends, or participants who have heard about the BOW workshop from a previous participant, may have less experience in outdoor skills.

In addition, the first workshops were advertised in more male-traditional avenues: flyers in sport shops, columns in the sports section of the newspaper, hunting magazines. These articles may have reached women who were already somewhat experienced in outdoor activities. In recent years, however, the non-traditional press has included articles in the Living section of newspapers (Brotman, 1994) that have reached more urban, less skilled audiences. Spirit, the Southwest Airlines in-flight magazine, ran an article about the BOW workshops that generated dozens of inquiries to each of the workshop coordinators listed (Hanson, 1995).

If this less-experienced audience is indeed the group that is being reached by subsequent workshops, changes in activities, attitudes, and purchases may be even
greater than those of the first group of participants surveyed. This hypothesis could be tested by surveying participants of the third or fourth workshops in several states to determine whether their responses are different than those of participants in the first or second workshops, as was done in this research.

Results of the marketing survey showed no significant difference between the purchases of workshop attendees and those of the control group. However, the number of purchases noted in the survey responses gives a strong indication that the women's market is an untapped gold mine for retailers. There is considerable interest in products made for women. The survey asked for clothing and equipment obtained for self, so this would not include purchases made for children and spouses by women.

Other questions are raised by this study. It was not asked by this survey why individuals in the control group did not attend a BOW workshops, only why they saw a decline in activities. Was the experience level of these women already beyond the scope of an introductory workshop like "Becoming an Outdoors-Woman?" Were they so inexperienced that even a novice-level workshop was too intimidating?

Several state agencies and conservation groups appear to be interested in offering one-day workshops or seminars that teach outdoor skills. The control group respondents did not tend to increase activities or have more positive attitudes even if they attended another educational experience instead of BOW. This raises the question of whether similar, shorter workshops or one-topic-specific seminars would have the same positive effect as "Becoming an Outdoors-Woman."
IMPLICATIONS AND FUTURE DIRECTIONS

Even before this study was completed, it was obvious that the worth of the "Becoming an Outdoors-Woman" program was already recognized (Matthews, op. cit.). While the research was going on, the program was growing by leaps and bounds. In 1995, thirty-four states and two Canadian provinces scheduled BOW workshops. Many states have far more applicants for a workshop than they can handle. Louisiana, for example, received 600 registrations for a workshop that could hold 100.

Training sessions for state agency personnel are the way the BOW workshops are implemented in each state. Three 1995 training sessions are expected to add about ten more states to the program, with the remaining states and more Canadian provinces registering at the 1996 agency training sessions.

"Becoming an Outdoors-Woman" workshops gain and keep a woman's interest in outdoor activities. Workshop attendees frequently ask for workshop length to be extended. They also ask for advanced classes, and for topic-specific workshops. This points to the need for "next step" opportunities. "Becoming an Outdoors-Woman" is an introductory-level experience that cannot and should not fill all the outdoor needs of its participants.

One logical recommendation is for state agencies that are already involved in the BOW program to offer follow-up opportunities. These could take many forms: A one-day, topic-specific trip such as a fishing trip or canoeing outing. Or perhaps a sponsored hunt, where the outfitter has been approved by the agency and women who
have attended a BOW workshop may sign up. Texas Parks and Wildlife Department, because of the incorporation of their state parks into their resource management agency, is undertaking several weekend camping and canoeing excursions led by agency personnel and past participants of "Becoming an Outdoors-Woman" workshops.

Acceptance and welcome of women in established sporting and conservation clubs is needed (Lueck, 1995). Members of these groups could begin a mentoring policy by male members, or offer incentives for bringing in female members. Topic-specific clinics for women could be held at club facilities, which would also introduce the women to the organization.

Sporting good stores also have many options that would reduce the intimidation factor often felt by women in the face of an all-male sales staff. These stores can make efforts to entice women inside by offering individualized lessons on equipment (Thomas, 1993), using their staff to teach at workshops for women, or setting up a display of clothing and equipment especially for women. Marilyn Oshman, chair of the board for Oshman’s Sporting Goods stores, noted that the macho industry is starting to realize the buying power of the female market (Acker, 1995).

This research showed a widespread and growing enthusiasm for outdoor skills among the participants of "Becoming an Outdoors-Woman" workshops. The value of these workshops will continue to be shown as women enter into hunting, fishing, and outdoor sports with less trepidation. Workshop participants will demand that more
programming for women be offered by natural resource agencies and sporting organizations. They will look for and expect better fitting, better quality clothing and equipment as the sporting goods market recognizes their buying power. Women who have attended a "Becoming an Outdoors-Woman" workshop will pass along their enjoyment of outdoor skills to their children and share it with friends.
LITERATURE CITED


"BECOMING AN OUTDOORS-WOMAN"
PARTICIPANT SURVEY

Which year(s) did you attend the "Becoming an Outdoors-Woman" workshop?

- □ 1991
- □ 1992
- □ 1993

Where?

- □ Oregon
- □ Arkansas
- □ Texas
- □ Nebraska
- □ Wisconsin

DEMOGRAPHICS Please answer these questions with current information (not from the time you attended the workshop). This will tell us the population we've reached.

Age:
- □ 18-24
- □ 25-34
- □ 35-44
- □ 45-54
- □ 55-64
- □ 65+

Marital Status:
- □ Never married
- □ Married
- □ Separated
- □ Divorced
- □ Widowed

Ethnic Heritage:
- □ Black
- □ Asian
- □ Native American
- □ Hispanic
- □ White/Other

Children:
- □ No
- □ Yes

ages: __________________________

Your Occupation: __________________________

Household Income:
- □ $0-$14,999
- □ $15-24,999
- □ $25-34,999
- □ $35-44,999
- □ $45,000 or more

Education:
- □ Less than high school
- □ High school/GED
- □ Some college
- □ College degree
- □ Advanced degree

The next questions address your activities during the year following your attendance at the "Becoming an Outdoors-Woman" workshop. Please answer the questions as they are written, but also feel free to attach a page if you would like to elaborate.

THANK YOU!
ACTIVITIES  Please indicate any change in your level of participation in outdoor activities during the year after attending the workshop.

• Which of the following did you do before the workshop? Circle all that apply.
• Please rank the activities as follows: High Increase, Increase, No Change, Decrease, Marked Decrease. Circle your letter response.

General fishing          HI I NC D MD
Fly fishing             HI I NC D MD
Fly tying              HI I NC D MD
Target shooting
- shotgun              HI I NC D MD
- rifle or handgun     HI I NC D MD
- muzzleloader         HI I NC D MD
Hunting with shotgun   HI I NC D MD
Hunting with rifle     HI I NC D MD
Hunting with muzzleloader HI I NC D MD
Turkey hunting         HI I NC D MD
Hunting with dogs      HI I NC D MD
Target archery         HI I NC D MD
Bowhunting             HI I NC D MD
Camping                HI I NC D MD
Outdoor cooking        HI I NC D MD
Orienteering           HI I NC D MD
Hiking                 HI I NC D MD
Nature photography     HI I NC D MD
Canoeing               HI I NC D MD
Taking children outdoors HI I NC D MD
Others                  HI I NC D MD
(list)______________________________

How important was the "Becoming an Outdoors-Woman" workshop in increasing your participation in one or more of the above activities? (Please skip if you showed no increases above.)
□ Workshop was essential
□ Workshop was important
□ Workshop may have helped a little
□ Workshop didn’t make me participate more

If your participation decreased, what was the reason? ________________________________

Have you joined any sporting/conservation groups since attending the workshop?
□ No
□ Yes (please list the names of the groups):
______________________________
______________________________
MARKETING Please tell us about purchases during the year following attendance at a "Becoming an Outdoors-Woman" workshop by answering these questions.

Which of the following did you acquire for yourself?

☐ Firearm  ☐ Camping gear
  ☐ rifle  ☐ (list) ____________________________
  ☐ shotgun
  ☐ pistol  ☐ muzzleloader

☐ Ammunition
☐ Hunting accessories
☐ Fishing rod
☐ Other fishing gear
☐ Bow
☐ Bowhunting equipment

Were any of these the same type or brand as equipment demonstrated at the workshop?

☐ All  ☐ Some  ☐ None

Were any of these purchased from sponsors or contributors to the workshop?

☐ All  ☐ Some  ☐ None

Where was the equipment purchased? Please check all that apply.

☐ Local sporting goods dealer
☐ Mail order catalog
☐ Department or chain store
☐ Sports show
☐ Direct from manufacturer
☐ Recommended by friend or relative

Why did you obtain a particular type of equipment? Please check all that apply.

☐ Saw it demonstrated at the "Becoming an Outdoors-Woman" workshop
☐ Made by/sold by a sponsor of the workshop
☐ Quality
☐ Cost
☐ Color/aesthetic appeal
☐ Fit your size/ability

Did seeing equipment or clothing demonstrated at the workshop influence the purchase?

☐ Definitely  ☐ Somewhat  ☐ No

Would you try to purchase equipment from a sponsor or contributor before trying another source?

☐ Definitely  ☐ Somewhat  ☐ No
ATTITUDES  These questions are intended to compare your feelings before and after attending the workshop. Please check all that apply.

What did you gain from attending the "Becoming an Outdoors-Woman" workshop?
□ Increased skill level
□ Chance to practice skill
□ Became familiar with equipment
□ Social contact with like-minded individuals
□ Met someone to hunt, fish, or hike with
□ Reassurance that I’m not unusual
□ Greater appreciation for the natural environment
□ I didn’t get much out of it
□ Other

What sessions did you attend at the "Becoming an Outdoors-Woman" workshop? Please rank them in the order that you enjoyed them, with #1 being your favorite.

The answer categories for the following questions are: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree. Please circle your response.

I am more interested in outdoor activities. SA A N D SD
I expect to continue using the outdoor skills I learned. SA A N D SD
I feel more positive toward the shooting sports. SA A N D SD
I feel more positive toward fishing. SA A N D SD
I feel more positive toward camping, canoeing, and other outdoor activities. SA A N D SD
I am likely to hunt or fish in the future. SA A N D SD
I am likely to camp, canoe, or participate in other outdoor activities in the future. SA A N D SD
I am less intimidated about trying outdoor activities. SA A N D SD
I am more interested in environmental protection. SA A N D SD
I have not used skills from the workshop this year. SA A N D SD
I do not expect to use what I learned in the future. SA A N D SD

THANK YOU FOR YOUR PARTICIPATION!

Please return this survey in the postage-paid envelope. If the envelope is missing, send to:
Diane Lueck, Research Assistant
College of Natural Resources
UW-Stevens Point
Stevens Point WI 54481.
APPENDIX 2

SURVEY OF INVOLVEMENT
IN OUTDOOR ACTIVITIES

DEMOGRAPHICS Please answer these questions with current information. This will tell us the population we've reached.

Age:
☐ 18-24
☐ 25-34
☐ 35-44
☐ 45-54
☐ 55-64
☐ 65+

Children:
☐ No
☐ Yes
ages: __________________________

Marital Status:
☐ Never married
☐ Married
☐ Separated
☐ Divorced
☐ Widowed

Your Occupation:
__________________________________________________________

Ethnic Heritage:
☐ Black
☐ Asian
☐ Native American
☐ Hispanic
☐ White/Other

Household Income:
☐ $0-$14,999
☐ $15-24,999
☐ $25-34,999
☐ $35-44,999
☐ $45,000 or more

Education:
☐ Less than high school
☐ High school/GED
☐ Some college
☐ College degree
☐ Advanced degree

Even though you have not attended a "Becoming an Outdoors-Woman" program, have you attended any other outdoor educational program during the past year?
☐ No ☐ Yes
(specify program) __________________________

The next questions address your activities during the past year. Please answer the questions as they are written, but also feel free to attach a page if you would like to elaborate.

THANK YOU!

57
ACTIVITIES  Please indicate any change in your level of participation in outdoor activities during the past year.

- Which of the following do you participate in?  Circle all that apply.
- Please rank the activities as follows: **High Increase, Increase, No Change, Decrease, Marked Decrease.** Circle your letter response.

<table>
<thead>
<tr>
<th>Activity</th>
<th>HI</th>
<th>I</th>
<th>NC</th>
<th>D</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>General fishing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fly fishing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fly tying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target shooting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- shotgun</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- rifle or handgun</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- muzzleloader</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting with shotgun</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting with rifle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting with muzzleloader</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkey hunting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hunting with dogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target archery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowhunting</td>
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<td></td>
</tr>
<tr>
<td>Camping</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor cooking</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Orienteering</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hiking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nature photography</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Canoeing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking children outdoors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
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<tr>
<td>(list)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If your participation decreased, what was the reason?  __________________________________________

Have you joined any sporting/conservation groups during the past year?
- No
- Yes (please list the names of the groups):
  __________________________________________
  __________________________________________
MARKETING Please tell us about purchases during the past year by answering these questions.

Which of the following did you acquire for yourself?

☐ Firearm
   ☐ rifle ☐ shotgun
   ☐ pistol ☐ muzzleloader

☐ Ammunition
☐ Hunting accessories
☐ Fishing rod
☐ Other fishing gear
☐ Bow
☐ Bow hunting equipment
☐ Camping gear
   (list)________________________
   ____________________________

☐ Compass
☐ Canoe
☐ Dutch oven
☐ Outdoor clothes
   ☐ Hunting/fishing apparel specifically
   ☐ Clothing for other outdoor pursuits

Where was the equipment purchased? Please check all that apply.

☐ Local sporting goods dealer
☐ Mail order catalog
☐ Department or chain store
☐ Sports show
☐ Direct from manufacturer

Why did you obtain a particular type of equipment? Please check all that apply.

☐ Quality
☐ Cost
☐ Color/aesthetic appeal
☐ Fit your size/ability
☐ Recommended by friend or relative
ATTITUDES These questions are intended to compare your feelings during the past year to previous years. Please circle all that apply.

The answer categories for the following questions are: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree. Please circle your response.

I am more interested in outdoor activities. (SA, A, N, D, SD)
I expect to continue using outdoor skills. (SA, A, N, D, SD)
I feel more positive toward the shooting sports. (SA, A, N, D, SD)
I feel more positive toward fishing. (SA, A, N, D, SD)
I feel more positive toward camping, canoeing, and other outdoor activities. (SA, A, N, D, SD)
I am likely to hunt or fish in the future. (SA, A, N, D, SD)
I am likely to camp, canoe, or participate in other outdoor activities in the future. (SA, A, N, D, SD)
I am less intimidated about trying outdoor activities. (SA, A, N, D, SD)
I am more interested in environmental protection. (SA, A, N, D, SD)
I have not participated in outdoor activities this year. (SA, A, N, D, SD)
I do not expect to use outdoor skills in the future. (SA, A, N, D, SD)

THANK YOU FOR YOUR PARTICIPATION!

Please return this survey in the postage-paid envelope. If the envelope is missing, send to:
Diane Lueck, Research Assistant
College of Natural Resources
UW-Stevens Point
Stevens Point WI 54481.
APPENDIX 3

Chi Square Analysis for Significant Difference
To determine whether responses of workshop participants were significantly different from the responses of the control group, chi square analysis was run on responses in two areas: activities and attitudes.

In these two analyses, difference between observed and expected frequencies was significant at \( P = 0.05 \). In fact, the difference in most activities listed (Table I) and some attitudes (Table II) was significant to more than \( P = 0.001 \).
Table I. Comparison between participant responses and control responses about activities, chi square analysis.

<table>
<thead>
<tr>
<th>Activity</th>
<th>$\chi^2$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General fishing</td>
<td>40.65**</td>
</tr>
<tr>
<td>Fly fishing</td>
<td>38.53**</td>
</tr>
<tr>
<td>Fly tying</td>
<td>14.33**</td>
</tr>
<tr>
<td>Shotgun target shooting</td>
<td>22.85**</td>
</tr>
<tr>
<td>Rifle target shooting</td>
<td>10.14*</td>
</tr>
<tr>
<td>Muzzleloader target shooting</td>
<td>13.35**</td>
</tr>
<tr>
<td>Hunting w/shotgun</td>
<td>11.07**</td>
</tr>
<tr>
<td>Hunting w/rifle</td>
<td>32.05**</td>
</tr>
<tr>
<td>Hunting w/muzzleloader</td>
<td>6.83*</td>
</tr>
<tr>
<td>Turkey hunting</td>
<td>20.92**</td>
</tr>
<tr>
<td>Hunting w/dogs</td>
<td>2.56</td>
</tr>
<tr>
<td>Target archery</td>
<td>20.68**</td>
</tr>
<tr>
<td>Bowhunting</td>
<td>12.64**</td>
</tr>
<tr>
<td>Camping</td>
<td>24.55**</td>
</tr>
<tr>
<td>Outdoor cooking</td>
<td>41.80**</td>
</tr>
<tr>
<td>Orienteering</td>
<td>42.72**</td>
</tr>
<tr>
<td>Hiking</td>
<td>44.28**</td>
</tr>
<tr>
<td>Nature photography</td>
<td>18.77**</td>
</tr>
<tr>
<td>Canoeing</td>
<td>26.30**</td>
</tr>
<tr>
<td>Taking children outdoors</td>
<td>9.40*</td>
</tr>
</tbody>
</table>

*Significant to 0.05 (3.841)
**Significant to 0.001 (10.828)
Table II. Comparison between participant responses and control responses about attitudes, chi square analysis.

<table>
<thead>
<tr>
<th>Statement</th>
<th>$\chi^2$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am more interested in outdoor activities.</td>
<td>7.80*</td>
</tr>
<tr>
<td>I expect to continue using outdoor skills I learned.</td>
<td>1.96</td>
</tr>
<tr>
<td>I feel more positive toward the shooting sports.</td>
<td>38.95**</td>
</tr>
<tr>
<td>I feel more positive toward fishing.</td>
<td>22.72**</td>
</tr>
<tr>
<td>I feel more positive toward camping, canoeing, etc.</td>
<td>4.33*</td>
</tr>
<tr>
<td>I am likely to hunt or fish in the future.</td>
<td>6.40*</td>
</tr>
<tr>
<td>I am likely to camp, canoe, etc. in the future.</td>
<td>0.49</td>
</tr>
<tr>
<td>I am less intimidated about trying outdoor activities.</td>
<td>5.21*</td>
</tr>
<tr>
<td>I am more interested in environmental protection.</td>
<td>1.46</td>
</tr>
<tr>
<td>I have not used skills this year.</td>
<td>3.54</td>
</tr>
<tr>
<td>I do not expect to use what I learned in the future.</td>
<td>0.13</td>
</tr>
</tbody>
</table>

*Significant to 0.05 (3.841)

**Significant to greater than 0.001 (10.828)