

Executive Summary

Woodsy Owl has been an important symbol for the United States Department of Agriculture (USDA) Forest Service since 1971. The Forest Service is working with LISBOA, Inc., a Washington, DC-based firm, to develop Woodsy Owl marketing materials and strategies, with the end goal of securing licensing agreements with private organizations and corporations. Such licensing agreements will increase the reach of the Woodsy Owl message, as well as provide continued funding for the program. LISBOA is contracted by USDA Forest Service to strengthen the Program, increase the number of partnerships and sponsorships for the development of associated products, and continue educational programming.

LISBOA is developing and refining a three-year comprehensive marketing and communication plan that will guide the promotion of Woodsy Owl messages and products. In order to develop an effective communication plan to meet USDA Forest Service goals, LISBOA conducted research in order to identify the target audiences' conservation behaviors, environmental education activities, purchasing choices, and awareness of Woodsy Owl. Research helps identify what venues and "windows of opportunity" are best for reaching the target audiences with information about Woody Owl as well as which Woodsy Owl products could most effectively be licensed and marketed.

Quantitative research was conducted in conjunction with the National Survey on Recreation and the Environment. The NSRE 2000 in total reaches approximately 50,000 randomly chosen households across all ethnic groups throughout the United States. The survey is composed of different modules. Items in the survey address various topics, including: participation in outdoor recreation, demographic information, household structure, lifestyle, and environmental attitudes. Dr. Megan Sheehan and Mr. Max Farrow of LISBOA worked with Iris Velez of USDA Forest Service, Dr. Barbara McDonald of USDA Forest Service, and Dr. Gary Green, the NSRE 2000 Project Manager, to develop a survey module focusing on Woodsy Owl for inclusion in the NSRE.

The project goal was a national random sample of 5,000 households for the Woodsy Owl module, 6,000 completed surveys were collected. In general, the findings were indicative of a target population that is engaging in environmentally conscious behaviors, and is interested in environmental education for children. In addition, Woodsy Owl enjoys substantial name/slogan recognition with the target audience. The following is a summary of some of the key findings from the research.

- Nearly 84% of respondents who care for young children, identified "Give a hoot, don't pollute." as Woodsy's slogan.
- In addition, nearly 68% of the respondents who care for young children said that they would be interested in a product, such as a game or book, if environmental information were included specifically for adults and children.

- 72% of the respondents who care for young children indicated that they were likely or somewhat likely to purchase a Woodsy Owl product.
- Most of the respondents who care for young children, 63%, reported buying a child's environmental education product in the previous 6 months.
- A majority of respondents who care for young children, 77%, reported discussing the environment with the children.
- Over 93% of respondents who care for young children reported engaging in at least one environmental activity with the children.
- Of the overall sample, 77.1% purchase environmentally friendly products.
- 51.7% of the total sample said that they were "Likely" or "Somewhat Likely" to purchase a Woodsy Owl product.
- Nearly 79% of the total sample identified "Give a hoot, don't pollute." as Woodsy's slogan.

Woodsy's "Give a hoot, don't pollute" slogan serves as a useful heuristic for a large segment of the target audience. Because of the strong association between Woodsy Owl and "Give a hoot, don't pollute." it is recommended that any future Woodsy Owl branding efforts maximize their reach by utilizing the original slogan by itself or in conjunction with the new slogan, "Lend a hand, care for the land."

Most of the respondents who care for young children were parents or grandparents. There is a need among caregivers for more educational information about the environment. Experiential activities should be the focal point of any environmental education initiatives for children.

There is an even stronger intent to purchase Woodsy Owl products among caregivers of young children than with the general sample. This distinction should be considered with regard to product development. It is likely that Woodsy Owl products, which are developed and targeted specifically for children and caregivers will be more successful.

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Introduction

Since 1971 Woodsy Owl has been an important icon for the United States Department of Agriculture (USDA) Forest Service. The Forest Service is seeking licensing agreements with private organizations to increase the outreach of the Woodsy Owl Partnership and Licensing Program. LISBOA has been contracted by USDA Forest Service to strengthen the Program, increasing the number of partnerships and sponsorships for the development of associated products, and continuing with educational programming.

LISBOA will develop a three-year comprehensive marketing and communication plan that will guide the promotion of Woodsy Owl messages and products. In order to develop an effective communication plan to meet USDA Forest Service goals, LISBOA conducted research in order to identify the target audiences' conservation behaviors, environmental education activities, purchasing choices, and awareness of Woodsy Owl. Research helps identify what venues and "windows of opportunity" are best for reaching the target audiences with information about Woody Owl. Furthermore, we can determine which products could most effectively be licensed and marketed with Woodsy Owl.

Prior to implementation of the quantitative research, a background literature review of non-proprietary, academic, and other studies that relate to environmental education for children, marketing to children, media use, and products was conducted. The purpose of the review was to identify research findings relevant to the Woodsy Owl program, i.e., what areas are best emphasized in future marketing, public relations and branding efforts. The end goal of the Woodsy Owl program is to deliver a lasting, educational environmental conservation message to children, and encourage those children to transfer that knowledge into action. The findings detailed in the studies below serve as guideposts in that effort.

Literature Review

Environmental Education and Children

Much environmental education research has examined the relationship between classroom learning and experiential learning with the formation of attitudes, values, and behaviors that impact the environment. The following details several studies, which systematically examined the impact of environmental education programs on students.

According to Singley & Anderson (1989) an effective education curriculum encourages students to transfer the information that they are learning from one context to another. Transfer is important at the early childhood level for environmental education because early childhood is a key period in the formation of environmental attitudes. Effective environmental education should provide a knowledge base that is age appropriate, encourages children's active participation, and occurs in real settings (Cohen, 1994). Basile's (2000) study, which focused on students' ability to transfer environmental knowledge, utilized an experimental design. Forty-five third graders from an urban school participated in the study. The control group received classroom instruction about the environment and one nature walk. In contrast, the experimental group received classroom instruction and participated in a "Nature at Your Doorstep" program, in which students are encouraged to use the scientific method to investigate their natural surroundings. Students posed questions, collected data, and analyzed their results with charts and graphs. Habitat was the main environmental topic for both groups. Basile (2000) reported that both the classroom and the "Nature at Your Doorstep" groups were able to transfer knowledge to near situations, ones similar to those that they had studied. However, only the experimental group was able to transfer their knowledge to contexts that were farther removed from the ones that they had studied.

Another study, which compared the effectiveness of classroom instruction to a field trip, was Smith, Rechenberg, Cruet, Magness, and Sandman's (1997) inquiry. The researchers utilized a pretest-posttest design to measure the effects of two versions of a paper recycling education program on the attitudes, knowledge, and behaviors of third through sixth graders from private and public schools for a sample of 349 students. The researchers compared two versions of the paper recycling education program. The first version of the program was a classroom presentation, which focused on basic knowledge of the paper recycling process, explained the need for recycling and offered some suggestions as to how students could reuse paper. The second version of the program was similar to the classroom presentation version. However, the information conveyed focused primarily on the composition of landfills and included a fieldtrip to a landfill. Two hundred students participated in version one and 149 students participated in version two. The results indicated that the program improved the children's overall knowledge, their attitudes, and increased their behavior regarding paper recycling. Greater improvements occurred in the private schools and with the older grade school children. Smith, et al. concluded that a well-designed, short-term education program, which focused on recommending specific pro-environmental behaviors aimed at grade school children can positively impact their behavior. The authors concluded that the tour of the landfill was an effective way of increasing students' recycling because it clearly illustrated the

adverse consequences of not recycling. On the other hand, the classroom discussion was better suited to increasing students' knowledge. Perhaps a combination of the two approaches would be the most effective way to increase students' knowledge and encourage desirable, pro-environmental behavior.

Zelezny's (1999) meta-analysis of 18 educational interventions was conducted both in classrooms and in nontraditional settings. The nontraditional settings included workshops, nature camps, and field studies. The classroom interventions improved environmental behavior more effectively ($r = .65$) than interventions in nontraditional settings ($r = .27$). The programs that most effectively improved the students' environmental behavior were the ones that were aimed at younger participants and the programs in which the participants were actively involved. Zelezny (1999) also reported that active participation strategies were more likely to be used in interventions that were conducted in classrooms rather than in nontraditional settings. However, few of the studies measured changes in actual environmental behavior, and according to Zelezny (1999) the researchers frequently used poor research methods. Overall, Zelezny asserts that both classroom and nontraditional educational interventions can improve environmental behavior.

Another study, which examined the effects of children's participation in environmental activities, was Leeming, Porter, Dwyer, Cobern, and Oliver's (1997) investigation. The researchers studied children's environmental attitudes and knowledge. Leeming et al. focused on the Caretaker Classroom Program, which encourages elementary school classes to engage in pro-environmental activities. The classes participate in at least eight environmentally focused activities during the school year. Leeming et al. assessed whether the participants' environmental attitudes and knowledge changed relative to the non-participants and whether the participants' learning affected their parents' environmental attitudes and knowledge. The study evaluated 16 participating classes and 19 non-participating control classes from 11 schools. The researchers utilized pretest and posttest environmental attitudes and knowledge assessment. According to Leeming et al. the Caretaker program had a significant positive effect on the participants' attitude toward the environment but did not impact their knowledge of environmental issues. Furthermore, the participants' parents also displayed significantly more pro-environmental behaviors after their children's activities than did parents of the control group.

In addition, Cronin-Jones (2000) compared the impact of traditional classroom and outdoor schoolyard instruction on 285 third and fourth grade students' knowledge of and attitudes about environmental science. Cronin-Jones used a modified Solomon Four Group design (an experimental design), which included control, classroom treatment, and schoolyard treatment groups. The classroom and schoolyard treatments groups focused on 10 learning units about plant and animal ecology. Content knowledge and attitude were assessed before and after the instruction. According to Cronin-Jones, analyses of posttest scores and gain scores indicated that the elementary school students learned significantly more about the selected environmental topics by participating in the outdoor schoolyard group than through the traditional classroom experience. Both the classroom and schoolyard treatment groups developed more positive environmental attitudes as a result of the instruction. However, the

attitude posttest and gain scores of the classroom and schoolyard groups were not significantly different.

These studies have focused on delivering environmental information to children, and changing children's values and environmental attitudes by virtue of that information. Further emphasized is the path to encouraging children to take the environmental knowledge they are given and convert it to action. The hands-on (or experiential) learning has proven very effective in modifying children's awareness, motivation and behavior, and even the behavior of their parents. Simple classroom-type education has shown to be beneficial in terms of enhancing basic environmental knowledge, but does not encourage the same level of transference that hands-on learning does. This fact has direct implications in the future development of the Woodsy Owl program, which could and should extend into schools, National Parks, and community events.

Marketing to Children

There are several relevant areas with regard to trends in marketing to children. The following information is reviewed: children and adolescent media usage; information processing modes; environmental products that are marketed to children; updating a brand image; and the trend to use realism in advertising.

Media Use

According to Janoff (1999), the Internet-savvy N-Generation has become the focus of retailers, marketers, and suppliers who are targeting youth dollars. The N-Gen is composed of consumers aged 2 through 22, who spend a significant amount of time using the Internet. It is estimated that by 2003 approximately 42 million people in this age group will be online. An overview of the youth market in the loosest of terms includes consumers as young as 2 and as old as 19. Furthermore, Janoff (1999) detailed how marketing groups have further segmented the youth market. The youngest group, pre-schoolers, consists of children ages 2 to 4. Early-schoolers are made up of children ages 5 to 8. The next group, pre-teens, also known as tweeners, are consumers aged 9 to 12 years. Early teens are adolescents aged 13 to 15. Finally, "mature" teens are those aged 16 to 19 years. According to Janoff (1999) children under age 12 influenced approximately \$500 billion worth of spending in 1997.

Ross (2000) detailed a study recently conducted by Mindshare USA, focusing on children aged 8-12 years. The research examined how children relate to communications. According to Ross the findings suggest that in addition to their playtime and homework, during an average day, children use between four and six different media types. Like adults, the participants said that they use television for entertainment and use printed materials to obtain information.

Information Processing

Pecheux and Derbaix (1999) developed a scale to measure children's attitudes towards brands. According to the authors, analysis of the scale indicated that children's attitudes are characterized by two factors – hedonic and utilitarian dimensions (where hedonic is defined as an emotional response, i.e. buying an impulse item; and utilitarian is defined as research- or thought-based decision, i.e. the process of buying a new car). The hedonic dimension was more important for children. Pecheux and Derbeix (1999) surmised that children's attitudes towards a brand are based on the hedonic dimension, which is cognitively less demanding and based primarily on affective processing. In other words, the authors propose that children's attitudes towards brands are based on their emotional responses as opposed to cognitive processing, which is more demanding.

Similar to the processing described by Pecheux and Derbeix is Petty and Cacioppo's (1986) Elaboration Likelihood Model, which describes peripheral and central routes to information processing focusing specifically on persuasion. The central route refers to cognitive, rational processes where messages are comprehended and accepted or rejected based on the strength or weakness of the arguments. The peripheral route, in contrast, includes all other processes and influences that are not rational and argument-based (Petty & Cacioppo, 1986). The peripheral route would include emotional appeals and would be more likely to be used by children who may not have the capacity to engage in complex rational processing.

Products

Not all products marketed to children are frivolous. According to Kerlin (2001), there are an increasing number of toys being marketed to environmentally conscious parents and children. The range of products includes trendy organic fabric clothing and environmentally conscious, educational board games that are printed on recycled materials. Other manufacturers are marketing stuffed animals with catchy names and soothing scent-filled stuffing to help children sleep. Products made by indigenous people such as jewelry are also becoming popular.

Brand Image

According to Kramer (1999) McDonald's Corporation recently explored possibilities for updating Ronald McDonald's image with young consumers. The corporation wishes to extend the character's image beyond the television commercials and personal appearances currently used. Ronald McDonald also serves as the ambassador for Ronald McDonald House Charities. One of the new marketing strategies, a home video series, has become an unexpected hit. The character also has a website, which has information about the character, activities for children, and information about store locations and products.

Advertising Realism

According to Smith (2001) a new trend in advertising is to use “real kids” in ads as opposed to trained child actors. Frequently, there is no script for the ad and the youths are asked questions and told to respond honestly. This approach allows for more spontaneity and honesty. Changes are done during the editing process. Some argue that this approach makes the advertising more accessible to the target audience. This may be a reflection of an overall trend toward reality-based presentations in the media.

Methods

The quantitative portion of the Woodsy Owl research was conducted in conjunction with the National Survey on Recreation and the Environment. The National Survey on Recreation and the Environment: 2000-2003, is administered by the Interagency National Survey Consortium and coordinated by the USDA Forest Service, Recreation, Wilderness, and Demographics Trends Research Group in Athens, GA and the Human Dimensions Research Laboratory at the University of Tennessee, Knoxville, TN.

The NSRE is the latest in a series of national surveys, begun in 1960 by the Outdoor Recreation Resources Review Commission (ORRRC). The federal government initiated this National Recreation Survey (NRS) to measure outdoor recreation participation in the United States. Since the initial survey, several subsequent surveys have been conducted.

In 1994 the NRS was renamed the National Survey on Recreation and the Environment (NSRE). The NSRE 2000 reaches approximately 50,000 households across all ethnic groups throughout the United States. The survey is composed of different modules. Items in the survey address diverse topics, including: participation in outdoor recreation, demographic information, household structure, lifestyle, environmental attitudes, natural resource values, and attitudes toward management policies. The demographic information included in the survey is identical to the Census.

The survey is administered at the Human Dimensions Research Laboratory at the University of Tennessee, Knoxville. The lab uses a Computer Aided Telephone Interviewing (CATI) system and trained interviewers. Four supervisors monitor approximately 50% of the telephone surveys to ensure quality control. The CATI uses a random digit dialing procedure to select households, ensuring a national, random sample. The NSRE oversamples by 2-3% in rural areas in order to compensate for the fact that the U.S. population is skewed towards metropolitan areas. A household member is then randomly selected by asking for the person over age 16 who mostly recently had a birthday. The interviewer continues to call back until he/she reaches that person or the household refuses to participate.

Dr. Megan Sheehan and Mr. Max Farrow of LISBOA worked with Iris Velez of USDA Forest Service, Dr. Barbara McDonald of USDA Forest Service, and Dr. Gary Green the NSRE 2000 Project Manager to develop a survey module focusing on Woodsy Owl for inclusion with the NSRE. After numerous revisions, the survey was comprised of 12 items (See Appendix C). After pre-testing of the items, data collection began in July 2002 and continued until February 2003. The goal of a national random sample of 5,000 was set at the beginning of the project. The final sample was comprised of 6,000 respondents. This was 20% larger than the set goal. Only completed surveys were used for analysis.

While data was collected on all respondents, certain items related only to individuals who care for a child/children between the ages of 3 and 10 years. This sub-sample consisted of 1,584 respondents.

Results

Complete Dataset – General Questions (N=6,000)

- The total responses to the survey constitute a nationally representative random sample of households in the United State (N= 6,000).
- There were 2,626 males (43.8 %) and 3340 females (55.7 %). Gender information was missing on 34 of the respondents.
- The age range of the participants was 16 to 99 (M=39.30, S.D.= 13.48).
- A small percentage of the sample, 272 (4.5%), reported being Hispanic, Spanish, or Latino.
- Most of the respondents were White (5,087) – 84.8%. The next largest group was Black or African American (365) – 6.1%. Followed by American Indian or Alaska Native (106) – 1.8%. The next largest group was Asian (79) 1.3%. Finally, the sample included few native Hawaiian or other Pacific Islanders (26) - .4%. One hundred ninety-five of the respondents (3.3%) refused to answer this question and 142 (2.4%) answered “Don’t know.”
- The majority of respondents (5,692) – 94.9% reported that they were born in the United States. Another 167 participants (2.6%) were born in another country, but have U.S. citizenship. Finally, 94 of the participants (1.6%) were not U.S. citizens.
- There was a range of political party affiliations among the participants. Democrats comprised 27.8% of the sample (1,668). Republications numbered 1,746 (29.1%). Independent affiliations were 11.4% of the sample (681). Many of the participants (21.7%) reported no affiliation (1,303).
- The level of education among respondents varied, 31.3% of the respondents reported having a high school degree or less (1,856). A sizeable portion of the sample (1,741) – 29%, reported having some college education thru an Associate’s degree. Lastly, 38.9% of the sample (2,335) reported having a Bachelor’s, Master’s, Professional degree, or Doctorate.
- Most of the sample reported being employed (3,962) – 66%.
- Income was measured in two different ways. Participants were either asked their specific household income or the interviewer read a range of income levels and participants were asked to indicate which category they were in. There was a wide range of reported annual incomes for the overall sample from \$62 to \$3,000,000. The mean reported household income was \$61,489.57 (S.D.= 87,064.96). In addition, with the range of incomes, the

most common response was the \$50,000 to \$74,999 range (967) 16.1%. The \$35,000 to \$49,999 range was the second most common response with (702) – 11.7% of the sample.

Complete Dataset – Woodsy Questions (N=6,000)

- Of the 6,000 participants, 26.3 % of the sample (1,580) said that they were familiar with Woodsy Owl. (See Appendix B for open-ended responses.)
- Many of the respondents frequently purchase environmentally friendly products, 34.2% (2,050) make one or more of these purchases per week. Another 33% (1,980) purchase environmentally friendly products about once a month and 10.4% (598) less than once a month. In sum, 77.1% (4,628) of the sample purchases environmentally friendly products.
- When asked how likely they were to purchase a Woodsy Owl product, 14.7% (879) of the sample reported that they were “Very Likely” and another 37.1% (2,224) said that they were “Somewhat Likely.” In other words, 51.7% of the sample said that they were “Likely” or “Somewhat Likely” to purchase a Woodsy Owl product.
- The respondents were then asked if the following slogans were associated with Woodsy Owl. The new Woodsy Owl slogan received the fewest number of “Yes” responses. The order of presentation for the slogans was randomized to prevent order effects.
 - “Give a hoot, don’t pollute” – 78.8% (4,730)
 - “Protect wildlife in your own backyard” – 45.7% (2,743)
 - “Every litter bit hurts” – 41.9% (2,514)
 - “Lend a hand, care for the land” – 37.3% (2,240)

Respondents Caring for Young Children – General Questions (N=1,584)

- Approximately 26.4% of the sample (1,584) reported caring for a child between the ages of 3 and 10.
- There were 649 males (41 %) and 922 females (58.2%). Gender information was missing on 13 of the respondents.
- The age range of the participants was 16 to 99 years (M=39.30, S.D.= 13.48).
- One hundred and eight participants reported being Hispanic, Spanish, or Latino. (6.8%)
- Most of the respondents were White (1,265) – 79.9%. The next largest group was Black or African American (138) – 8.7%. Followed by American Indian or Alaska Native (33) – 2.1%. The next group was Asian (27) – 1.7%. Finally, the sample included few native Hawaiian or other Pacific Islanders (9) – .6%.
- The majority of respondents (1,491) – 94.1% reported that they were born in the United States. Another 48 participants (3%) were born in another country, but have U.S. citizenship. Finally, 26 of the participants (1.6%) were not U.S. citizens.
- There was a range of political party affiliations among the participants. Democrats comprised 27% of the sample (428). Republications numbered 471 (29.7%). Independent affiliations were 9.6% of the sample (152). Many of the participants (23.7%) reported no affiliation (376).
- The level of education among respondents varied in a similar pattern to the overall sample.
- Most of the sample reported being employed (1,129) – 71.3%.
- Interestingly, 21.2% of the sample (336) reported being full-time homemakers.
- Annual income was measured in two different ways. Participants were either asked to indicate their specific household income or the interviewer read a range of income levels and participants were asked to indicate which category their income fell. There was a wide range of reported incomes for this sub-sample from \$500 to \$750,000. The mean reported household income was \$60,935.28 (S.D.= 50,160.69). In addition, for the range of incomes, the most common response was the \$50,000 to \$74,999 range (296) 18.7%. The \$35,000 to \$49,999 range was the second most common response with (208) 13.1% of the sample.

Respondents Caring for Young Children – Woodsy Owl Questions (N=1,584)

- The participants who reported caring for a child between the ages of 3 to 10 years responded to more questions than the participants who did not care for a young child.
- Of the 1,584 participants who care for a young child the roles were as follows:
 - Parents – 66.6% (1,055)
 - Grandparent – 17.8% (282)
 - Sibling – 4.1% (65)
 - Teacher – 3.8% (60)
 - Day-care provider – 2.8% (45)
 - Other – 7.7% (122)
- When asked if they talk to kids about the environment, 77% (1,220) responded that they did. Furthermore, of those respondents who do talk to the child/children about the environment the frequency of these discussions was as follows:
 - One or more times per month – 35.6% (564)
 - Once a month – 27.2% (431)
 - Less than once a month – 12.1% (191)
 - Don't Know – 2.1% (34)
- Next, respondents were asked if they would be more or less likely to talk to the child/children about the environment if they had more information. Most of the participants, 61.1% (968), said that they would be more likely. Only 3.8% (60) said they would be less likely and 28.9% (457) said that they would talk about the same.
- Participants were also asked if they had engaged in a range of environmentally conscious activities in the past year. The following is a summary of participation.
 - Recycling – 81.1% (1,284)
 - Gardening – 72.7% (1,151)
 - Planting a tree – 49.7% (788)
 - Participating in Earth Day or Clean Up events – 43.4% (687)
 - Visiting a wildlife or bird sanctuary – 22% (349)
- Recreational activities were the next topic. Respondents reported engaging in the following activities.
 - Learning games or activities – 84.1 % (1,332)
 - Sightseeing – 75.4% (1,194)
 - Outdoor sports – 74.5% (1,180)
 - Nature and interpretive walks – 58% (918)
 - Camping or hiking – 53.3% (845)
- Participants were then asked about their recent purchases. The respondents reported buying the following children's products within the past six months, 97.16% (1,539) of the respondents indicated purchasing at least one of these products.

- Books or comic books – 84.9% (1,345)
 - Arts and crafts supplies – 81.3% (1,287)
 - Children’s videos or music – 81.2% (1,286)
 - Board games or puzzles – 75.1% (1,189)
 - Computer or video games – 65.3% (1,035)
 - Action figures or dolls – 61.2% (969)
 - Stuffed animals – 59.1% (936)
- Participants were next asked how many times they purchased environmental education products, such as games, figures, activity kits, or items that help children learn more about the environment in the past six months.
- More than 5 times – 9.9% (157)
 - 3 – 5 times – 16.6% (263)
 - 1-2 times – 36.7% (581)
 - Never – 34.2% (542)
- Next, respondents were asked if they would “be interested in a product, such as games, books, web-sites, if environmental information were included specifically for adults and children.” Most of the participants, 67.7% (1,072) said that they would be interested.
- Of the 1584 participants, 30.7% of the sample (487) said that they were familiar with Woodsy Owl.
- Many of the respondents frequently purchase environmentally friendly products, 37.6% (596) make one or more of these purchases per week. Another 32.1% (509) purchase environmentally friendly products about once a month and 11.7% (186) less than once a month. In sum, 81.5% (1,213) of the sample purchases environmentally friendly products.
- When asked how likely they were to purchase a Woodsy Owl product, 20.7% (328) of the sample reported that they were “Very Likely” and another 51.5% (815) said that they were “Somewhat Likely.” In other words, 72.2% of the sample said that they were likely to purchase a Woodsy Owl product.
- The respondents were then asked if the following slogans were associated with Woodsy Owl. The new Woodsy Owl slogan received the fewest number of “Yes” responses. The order of presentation for the slogans was randomized to prevent order effects.
- “Give a hoot, don’t pollute” – 84.2% (1,333)
 - “Protect wildlife in your own backyard” – 51.1% (810)
 - “Every litter bit hurts” – 42.6% (675)
 - “Lend a hand, care for the land” – 42 % (665)

Discussion

While only 26% of the overall sample of 6,000 participants indicated that they were familiar with Woodsy Owl, nearly 79% correctly matched Woodsy with the slogan “Give a hoot, don’t pollute.” This indicates that there is actually strong recognition for Woodsy’s character as well as his important environmental message. However, the “Give a hoot, don’t pollute” slogan serves as a useful heuristic for a large segment of the target audience. Because of the strong association between Woodsy Owl and “Give a hoot, don’t pollute.” it is recommended that any future Woodsy Owl branding efforts maximize their reach by utilizing the original slogan by itself or in conjunction with the new slogan, “Lend a hand, care for the land.” Only 37.3% of the total respondents associated the “Lend a hand, care for the land.” slogan with Woodsy. This recognition pattern was even stronger for participants who care for young children. Even more caregivers, 84% associated Woodsy Owl with the “Give a hoot, don’t pollute.” slogan.

Another important finding from the survey is that many respondents frequently purchase environmentally friendly products, 67% of the 6,000 respondents purchase environmentally friendly products once a month or more. This is another potential market for Woodsy Owl licensed products.

More than 50% of the 6,000 respondents indicated that they were likely or somewhat likely to purchase a Woodsy Owl product. This represents a tremendous potential market for Woodsy Owl products. Manufacturers should be consulted to develop Woodsy Owl products with strong environmental themes.

Most of the respondents who care for young children were parents (66.6%) or grandparents (17.8%). When designing non-school based educational programs for children, it is parents and grandparents who should be targeted. Most of the respondents who care for young children (77%) indicated talking to the children about the environment. Previous research findings indicate that hands-on (or experiential) learning has proven very effective in modifying children’s awareness, motivation and behavior, and even the behavior of their parents. Simple classroom-type education enhances basic environmental knowledge, but does not encourage the same level of transference that hands-on learning does. Therefore, experiential activities should be the focal point of any environmental education initiatives.

Most of the caregivers (61%) also indicated that they would be more likely to discuss the environment with the child/children if they had more information. Furthermore, most of the caregivers (63%) indicated that in the previous six months they had purchased environmental education products (games, figures, or activity kits) to help the children learn about the environment. In addition, most of the caregivers, nearly 68% indicated that they would be interested in a product that included environmental information specifically for adults and children. These responses indicate a need among caregivers for more educational information about the environment.

Over 93% of the caregivers reported engaging in at least one of the following environmental activities with the children: recycling, gardening, planting a tree, participating in Earth Day or Clean Up events, or visiting a wildlife/bird sanctuary. In addition, there were high participation rates among the following recreational activities: learning games, sightseeing, outdoor sports, nature or interpretive walks, and camping or hiking. Over 97% of the sample indicated participating in at least one of the recreational activities. These findings represent an opportunity to develop Woodsy Owl educational efforts, community events, and licensed products that capitalize on the target market's participation in environmental and recreational activities.

Almost all of the respondents (97%) reported purchasing at least one of the following children's products within the previous six months: books or comic books, arts and crafts supplies, children's videos or music, board games or puzzles, computer or video games, action figures or dolls, or stuffed animals. In addition, 72% of the caregivers said that they were likely or somewhat likely to purchase a Woodsy Owl product. There is even stronger intent to purchase Woodsy Owl products among caregivers of young children than for the general sample. This distinction should be considered with regard to product development. It is likely that Woodsy Owl products, which are developed and targeted specifically for children and caregivers will be more successful with this more targeted market.

Appendix A: Charts and Graphs

Figure 1: Gender (N=6000)

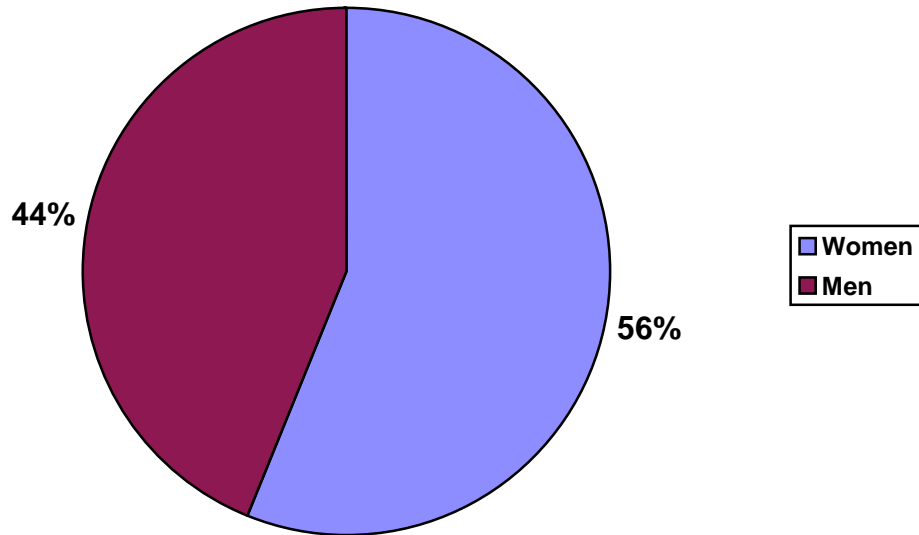


Figure 2: Woodsy Slogans (N=6000)

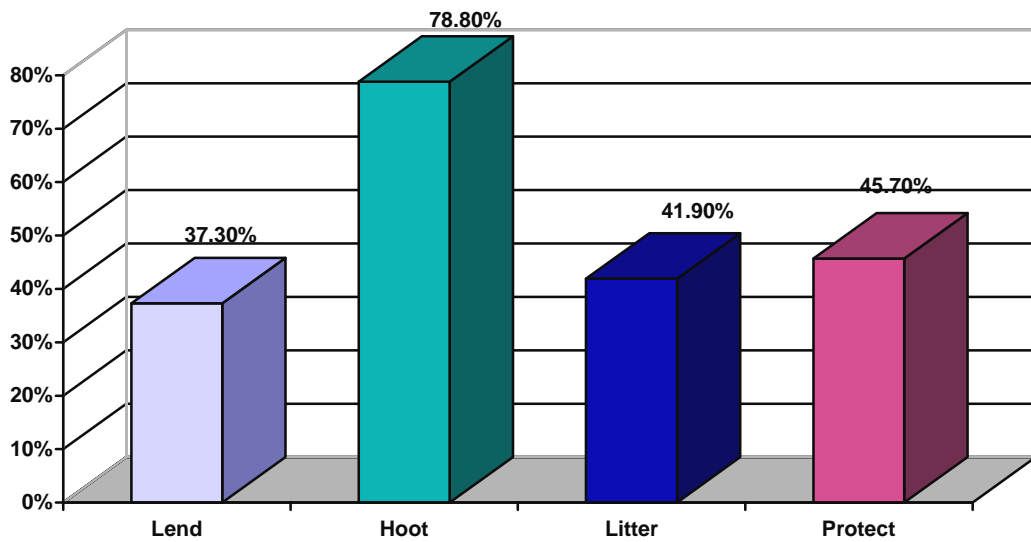


Figure 3: Likelihood of Buying Woodsy Product – Respondents with Young Children (N=1584)

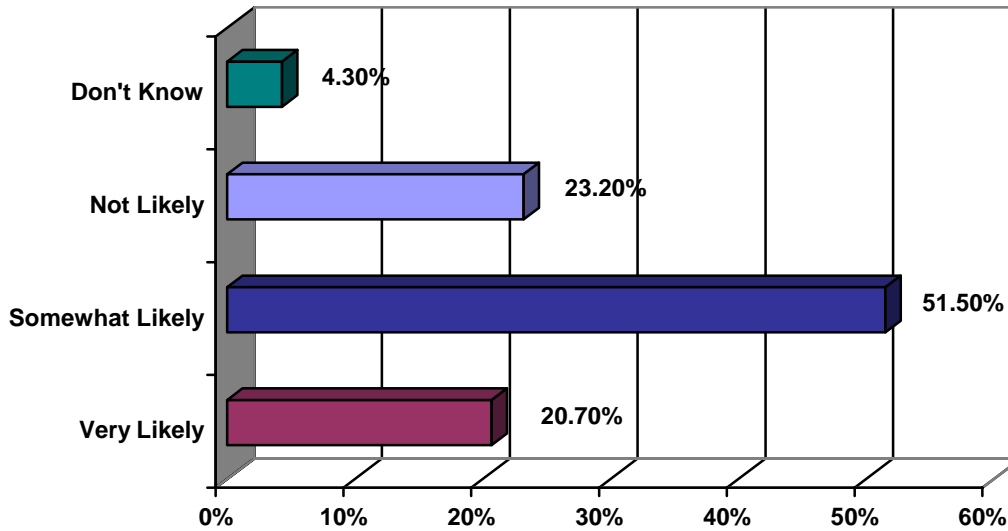


Figure 4: Environmental Activities – Respondents with Young Children (N=1584)

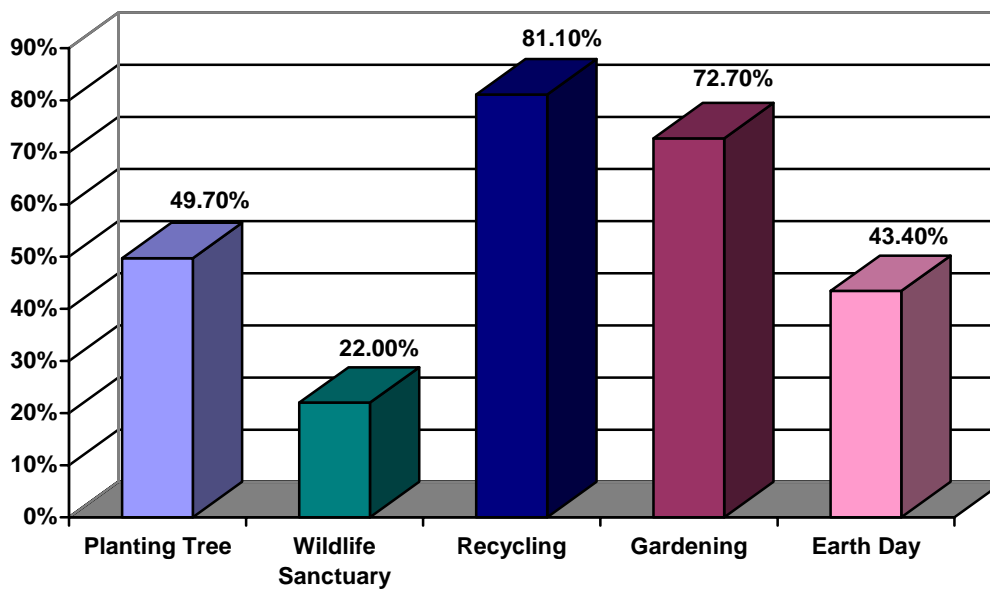


Figure 5: Recreational Activities – Respondents with Young Children (N=1584)

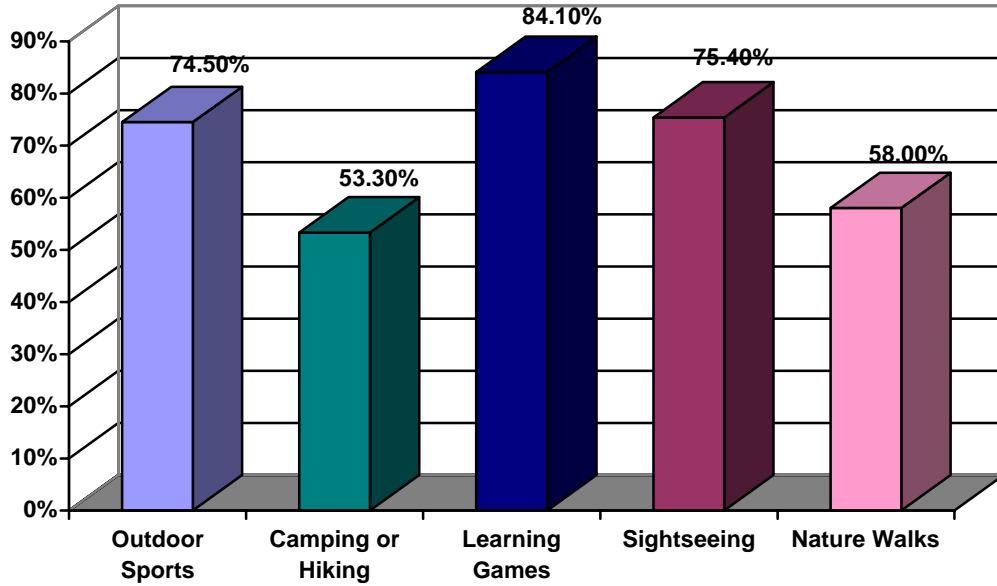


Figure 6: Product Purchases – Respondents with Young Children (N=1584)

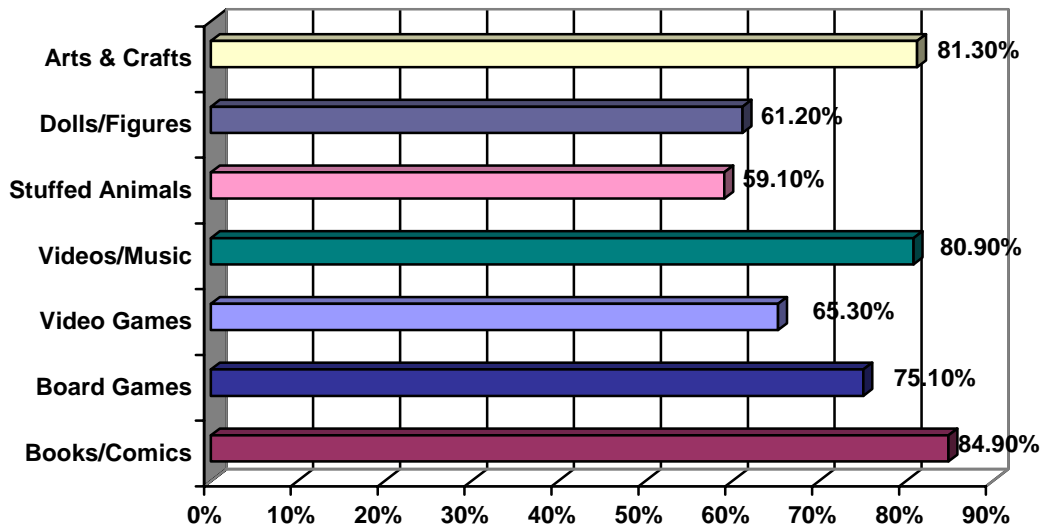
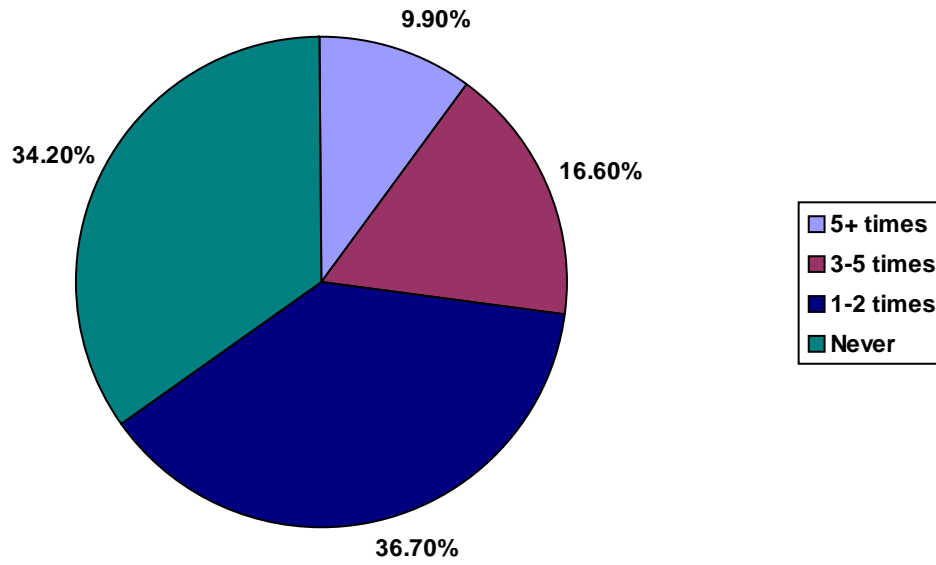


Figure 7: Environmental Education Purchases – Respondents with Young Children (N=1584)



Appendix B: Open-ended Responses

Familiarity with Woodsy Owl

Respondents were asked, “Are you familiar with Woodsy Owl?” In addition to recording Yes/No/Don’t Know responses, the interviewers also documented any spontaneous replies that the participants uttered in response to the question. Interestingly, eleven of the participants immediately replied, “Give a hoot, Don’t Pollute.” In addition, one participant began to sing the Woodsy Owl Theme Song. Several participants indicated remembering Woodsy from their childhoods. Furthermore, many respondents associated Woodsy Owl with Smokey the Bear.

- “A little.”
- “A little bit.”
- “About littering.”
- “An owl kind of like Smokey the Bear.”
- “An owl that says, ‘Don’t start fires.’”
- “Companion to Smokey the Bear program.”
- “From the 70’s.”
- “Give a hoot, Don’t pollute.” [10 respondents immediately stated the tagline.]
- “He’s the coolest.”
- “He is a conservation guy, right?”
- “He is the one on PBS.”
- “He visited the parks.”
- “He wears a little hat.”
- “Heard of it.”
- “Him and Smokey the Bear.”
- “I’ve heard of him.”
- “I’ve heard of it but that’s about all.”
- “I’ve seen him on TV.”
- “I’ve seen it before somewhere but for the kids not for me.”
- “I’ve seen it on TV.”
- “I’ve seen it.”
- “I guess I have seen it.”
- “I know Smokey the Bear.”
- “I know the slogan.”
- “I remember about him in the 70s and 80s promoting not polluting.”
- “I remember him from childhood but not recently. The ‘Give a Hoot, Don’t Pollute’ guy.”
- “I saw it on TV.”
- “I think I’ve heard of it.”
- “I think it something with [Park] Rangers.”
- “I think so.”
- “I think Woodsy had visited the school.”
- “I have heard of him but I don’t know him.”
- “Is he the give a hoot, don’t pollute?”
- “Is it the trash owl?”

- *“It's been ages ago.”*
- *“It has a Robin Hood hat on.”*
- *“It sounds familiar but I don't know.”*
- *“Just by name.”*
- *“Kind of.”*
- *“New mascot for the environment.”*
- *“On TV.”*
- *“Probably deals with pollution.”*
- *“Seen on television, I think”*
- *“Slightly.”*
- *“Somewhat.”*
- *“The ecology owl.”*
- *“The kids get the books.”*
- *“The little cartoon.”*
- *“The national forest owl.”*
- *“The owl with the big glasses.”*
- *“The same woodsy owl that's been around for a while.”*
- *“Vaguely.”*
- *“Very little, my daughter talks about it.”*
- *“Walks around with Smokey the Bear.”*
- *“When I was a kid.”*
- *“With the Forest Service.”*

Appendix C: Woodsy Owl Survey

Woodsy Owl Survey

1. Do you care for one or more children between the ages of 3-10 years?
If No, go to question 10.
If Yes, which of the following best describes your relationship to the child or children that you care for?
 - parent
 - grandparent
 - sibling
 - day care provider
 - teacher
 - Other

2. Do you talk to the child or children about environmental issues? Y / N
If No, go to question 3.
If Yes, how frequently do you discuss the environment?
 - one or more times per week
 - at least once a month
 - less than once a month

3. If you had more information about the environment, would you be more or less likely to teach the child/children about the environment?
 - More likely
 - Less likely
 - About the same
 - Don't Know

4. Have you or the child/children participated in any of the following activities to care for the environment in the past year? (Please indicate yes or no)
 - Planting a tree
 - Contributing to a wildlife or bird sanctuary
 - Recycling
 - Gardening
 - Participating in Earth Day Events or Cleanup Days

5. Have you participated in any of the following activities with the child/children? (Please indicate yes or no)
 - Outdoor sports (baseball, soccer, football)
 - Camping/hiking
 - Learning games/activities/arts & crafts
 - Sightseeing

6. How frequently do you buy environmentally friendly products? (Environmentally friendly products = organic ingredients, minimal packaging, or recyclable materials, etc.)
- never
 - one or more times per week
 - at least once a month
 - less than once a month
7. Have you purchased any of the following products within the past 6 months for the child or children? (Please indicate yes or no)
- Books/Comic Books
 - Board games/puzzles
 - Computer games/Video Games
 - children's videos or music
 - Stuffed Animals
 - Action Figures/Dolls
 - Arts & Crafts supplies
8. In the past six months, how many times did you purchase environmental education products, such as games, figures, activity kits, or items that help children learn more about the environment?
- Never
 - 1-2 times
 - 3-5 times
 - More than 5 times
9. Would you be interested in a product if environmental information were included specifically for adults and children?
- Yes
 - No
 - Don't Know
10. Are you familiar with Woodsy Owl?
- Yes
 - No
 - Don't Know

11. How likely would you be to purchase an environmentally friendly, affordable Woodsy Owl product?

- Very Likely
- Somewhat Likely
- Not Likely
- Don't Know

12. I am going to read a list of five slogans. Please tell me if you think Woodsy Owl has ever been associated with any of them. (Please indicate yes or no)

- Lend a hand, care for the land.
- Give a hoot, don't pollute
- Every litter bit hurts.
- Protect wildlife in your own backyard.

Appendix D: References

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