

# OUTDOOR EDUCATION IN THE MID-ATLANTIC STATES: AN ASSESSMENT OF MARKET SEGMENTATION

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**Abstract.**—Programs that emphasize experiential learning in outdoor settings have a long history in the United States and have been offered by a wide range of organizations. This study focused on programming that included environmental education, experiential education, and outdoor education. The purpose of this study was to examine the range of services and programs that offer outdoor education and environmental education services in the Mid-Atlantic region and to identify underserved aspects of the market. Environmental education programs geared for elementary and middle school students are very common across the region, but programming for high school and college students and adults are offered much less frequently. The primary finding was the high degree of variability in environmental education facilities, programs offered, and associated costs.

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## 1.0 INTRODUCTION

Programs that emphasize experiential learning in outdoor settings have a long history in the United States and have been offered by a wide range of organizations. Private camps, non-profit organizations, extension services, and government-sponsored programs may all be providers of outdoor education services. These organizations have traditionally had a wide range of missions and objectives and have tailored their programming efforts to different sub-sets of the population. While these programs often overlap a great deal, philosophical orientations are an important issue. The philosophical orientation affects the type of programs offered, which in turn impacts the number and qualifications of staff that will be required, the equipment, and the facilities necessary for operations.

## 2.0 BACKGROUND

This study focused on programming that included environmental education, experiential education, and outdoor education. Environmental education has five primary goals (Neill 2004). They are “to 1) help students develop factual knowledge about the natural environment, particularly with regard to how ecosystems work and human impacts on the natural environment; 2) foster more positive perceptions about the value of the natural world; 3) develop eco-friendly habits, such as getting people to recycle and to produce less waste; 4) engage students in environmental rejuvenation projects and action; 5) develop students’ psychological and spiritual relationship with nature.” Environmental education programs with these goals began to develop in the 1960s when Americans started to become concerned with problems of pollution and habitat destruction. Currently, environmental education programs may be a part of the curriculum of school districts or may be offered as an educational service by national or state parks or non-profit organizations. Many programs that operate primarily throughout the summer tend to offer environmental education programs to schools or individuals during their off-season in winter.

Experiential education is a term used to describe programs that emphasize challenging physical activities in outdoor environments as a way to help participants grow socially and physically. This form of education is very similar to adventure education as activities include kayaking, backpacking, rafting, rock climbing, and ropes courses. These types of programs are geared more towards teenagers or the young adult market, and the purpose of these programs is to help young people to develop self-confidence, self-awareness, and more mature group interaction skills (Miles & Priest 1999). Experiential education programming is offered by a variety of organizations for older clients (young adults). These adventurous programs have been extensively used, however, with special populations, particularly teens with alcohol and/or drug problems or who have been in the juvenile justice system.

Outdoor education refers to a variety of programs that incorporate environmental studies, recreational skills and interpersonal skills with an experiential learning philosophy (Gilbertson et al. 2006). Neill defined outdoor education as occurring “when small groups of people participate in organized adventurous activities in natural settings and primarily use themselves as the resource for solving problems.” Outdoor education participation ranges across the spectrum from children to adults and is offered at programming organizations all across the world.

### 3.0. PURPOSE

The purpose of this study was to examine the range of services and programs that offer outdoor education and environmental education services in the Mid-Atlantic region and to identify underserved aspects of the market. This research was done as part of a feasibility study for Concord University in support of the university’s efforts to develop an environmental research and education center. This phase of the feasibility project analyzed the current state of the industry.

### 4.0 METHODS

To organize information gathered on individual outdoor education and environmental education centers, researchers made worksheets of questions to collect consistent information from each center sample. Forty-six environmental education centers and similar facilities offering environmental education programs were chosen for use in this study. Seventy-five centers were reviewed and those with the most pertinent characteristics in what the researchers were looking for were chosen.

Initial research was conducted using public information via the Internet, in most cases from the center’s website. Appropriate websites were located using the Google or Yahoo search engines with keywords, “outdoor education center” or “environmental education center” and the appropriate state. This information was supplemented by follow-up phone interviews or emails to clarify inconsistencies with individual center personnel. The Mid-Atlantic states were the primary focus. The study included the states of West Virginia, Virginia, Kentucky, Maryland, North Carolina, Kentucky, Tennessee, and

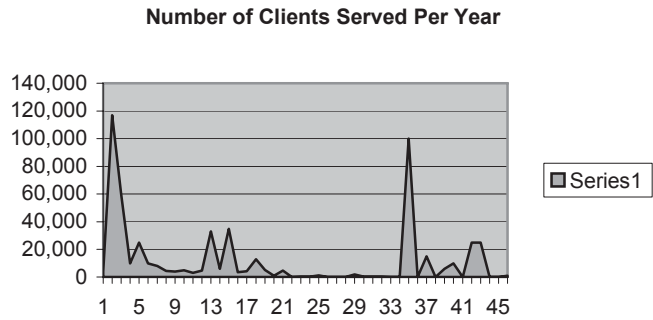


Figure 1.

Pennsylvania. The Yosemite Institute in California was also studied as a primary example.

## 5.0 RESULTS

### 5.1 Participation Levels

The programs and centers examined in this study varied greatly in the number of clients that they served each year (Figure 1). One center located near a large urban area served over 117,000 clients in environmental education programs. Conversely, another center reported having served only 98 participants per year. On average, centers served approximately 3,000 to 8,000 participants per year. Six centers were unable to provide this information.

### 5.2 Institutional Affiliation

Environmental education centers operate under a wide variety of institutional affiliations (Figure 2). Of the 46 centers examined in this study, 15 (32.6% of sample) were operated by a private, non-profit organization that was dedicated to the center’s operation. The National Park Service (NPS) or state or regional park authorities operated 12 centers in the sample (26%). Colleges or universities operated four (8.6%) and a university in conjunction with the NPS or other park entity operated

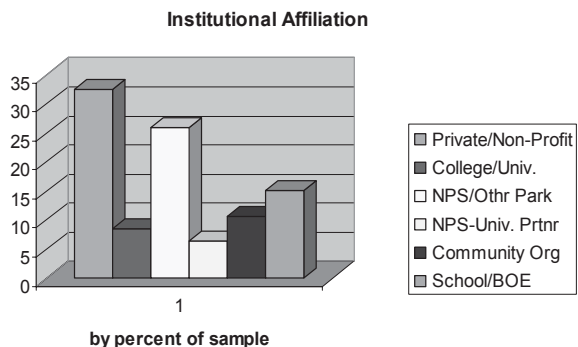


Figure 2.

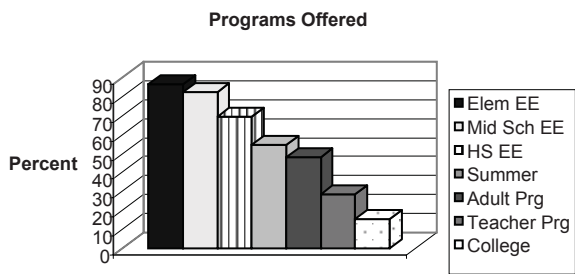


Figure 3.

three centers (6.5%). Community organizations such as churches or the YMCA operated five centers (10.8%) and public school systems operated seven centers (15.2%).

### 5.3 Program Offerings

The most common program format that was found was environmental education for elementary students, indicated by 86.9 percent of the centers (Figure 3). Environmental or outdoor education programs for middle school students were offered by 82.6 percent of the centers and high school programs were offered by 69.5 percent. Programs were offered 54.3 percent of the time in the summer, and 17.3 percent of the centers offered programs exclusively in the summer. Workshops and continuing education programs for teachers were offered by 28.2 percent of the centers. College student programming was offered by 15.2 percent of the centers, and programs for adults were offered by 47.8 percent.

### 5.4 Recreational Facilities

The various centers and programs examined in this study varied widely in the recreational and programmatic facilities available on site (Figure 4). Programs or centers that began as camps tended to have more extensive

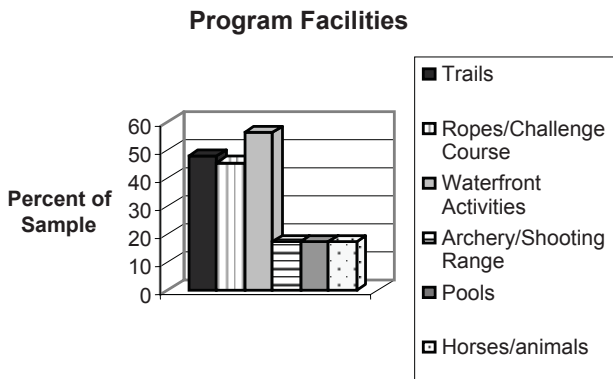


Figure 4.

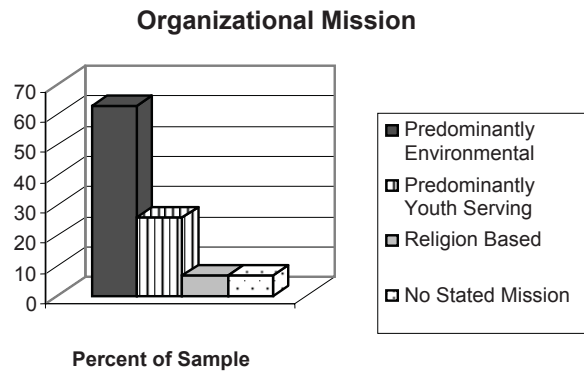


Figure 5.

facilities than those centers that were more oriented towards research and education. Waterfront activities such as kayaking and canoeing were the most common feature offered (56.5% of the sample). Hiking and biking trails (47.8%) and ropes/challenge courses (45.6%) were also very common. Other activities that were offered regularly (15%) included archery or shooting ranges, swimming pools, and horseback riding or petting zoos.

### 5.5 Organizational Missions

In addition to the organizations' affiliations, the mission statements of sampled programs were also analyzed (Figure 5). As may be expected, the majority of centers' mission statements focused predominantly on environmental protection and awareness (63% of the sample) while a smaller percentage (26%) had mission statements that focused on youth service (i.e., based more on experiential education). Three centers (6.5%) had religious mission statements and three others had no stated mission.

### 5.6 Residential Programs

Environmental education programming was available exclusively as a residential program at 36 percent of the centers and exclusively as a day program at 23 percent of the centers (Figure 6). Forty-one percent of the centers offered both day and residential programs.

### 5.7. Program Costs

The centers examined in this study charged a wide range of rates to participants for programs. Among day-priced programs, prices ranged from \$10.00 to \$152.00 per participant per day with an average of \$42.00 for the whole day. One program, the National Youth Science

### Day Programs versus Residential Programs

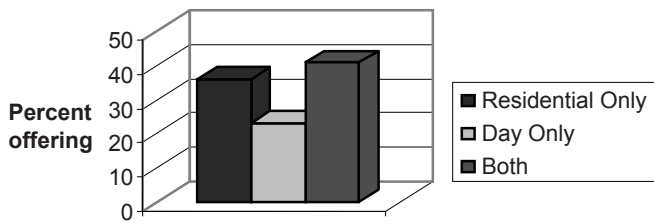


Figure 6.

Camp, was a completely sponsored program at no cost to participants whatsoever. However, a competitive application process was required to be eligible for that particular program. Most programs charged by the hour rather than by the day. The price per student per hour ranged anywhere from \$2.00 to \$14.00 with an average of \$4.30 for a one-hour program. Five centers offered completely free hourly programs to participants. Of the 46 centers in this study, eight centers (17.4% of the sample) charged exclusively by the day while the other thirty-eight centers (82.6%) charged by the day or by the hour.

Residential environmental education or outdoor education programs were offered by 36 of the centers studied. The average per student per day cost of residential programs was \$52.25 with a range from \$11.00 to \$143.00. As noted above, one of the programs in the sample was fully sponsored and did not charge participants.

There was obviously a wide variance in these participant costs. There are a number of factors that can explain this wide variance in costs.

#### 1. *Sponsorship and Cost Recovery Philosophy.*

Programs and centers that have external funding sources such as foundations or charitable organizations are not totally dependent on program revenue and may charge less than the cost of program provision. Some of these agencies operate on a mission to serve youth from disadvantaged areas and seek ways to operate programs without full cost recovery.

2. *Fixed Costs of Programs and Facilities.* As may be noted from previous sections, there is no “standard” outdoor education facility. Centers may offer a wide variety of features, some of which are more costly to offer than others. Swimming pools require high levels of attention and maintenance as well as special training for staff assigned to this maintenance. Horse/animal programs also require year-round care and supervision. Horseback riding programs also have very high liability insurance costs. In short, some features are costly to maintain and operate, and these expenses are transferred to clients.

3. *Staff Costs.* Some programs are able to use teachers and parents to assist in basic environmental education programming. In situations where this approach is appropriate, one paid staff member may be able to supervise a very large number of clients. In more specialized situations, a higher staff to client ratio will be required. Examples of these more specialized situations may include residential programs (where 24 hour supervision is needed), programs that include swimming or waterfront activities, or adventure/challenge courses. Typically, there are industry standards that specify the staff/client ratio for almost any activity, and programs must meet or exceed these ratios or face lawsuits for negligence in the event of an accident. Other situations where specialized or additional staff may be necessary include instruction in technical outdoor skills or programs that travel between multiple sites.

Other factors measured in this study included staff needs, facility acreage, meeting facilities, and management boards.

## 6.0 DISCUSSION AND CONCLUSIONS

This study facilitated many observations concerning trends in outdoor and environmental education in the Mid-Atlantic states.

A primary finding was the high degree of variability in environmental education facilities, programs offered, and

associated costs. Programs could be residential or day programming, and institutional missions varied widely. However, environmental education programs targeting elementary and middle school students are common across the map. Programs for high school students, college students, and adults are offered less frequently.

In regard to commonly shared features of successful centers (those that offer a wide range of programming, have well developed facilities, and high attendance) many have affiliations with government-owned parks and natural areas. Some successful centers also began when the public's concern with environmental issues was much higher than it is currently. Many of these centers also began during times when public funding was more readily available. It was further concluded that the largest, most developed, and most heavily used centers tend to be located closer to urban areas, while programs in rural areas were less common, smaller, and offered less frequently.

Researchers also found that some states had stronger environmental education infrastructure and programs than others. This difference may be tied to the role of environmental education in state standards of learning; states that value environmental education may support

more programs and incorporate the study into state educational standards.

Finally, terminology of "environmental education center" is an issue. Many organizations, such as the Virginia State Park system, use the term "environmental education center" for what may better be described as a visitor center, that is, a small facility with interpretive displays and exhibits. This issue may need to be considered, as misuse of the term could lead to an inaccurate public image associating a visitor center with an environmental education center.

## 7.0 CITATIONS

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