

PRACTICE

Opportunities to explore nature and wellbeing through kayaking for inner-city youth

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Introduction

The Health and Recreation Committee of the United States National Park System (NPS) recommended that the agency undertake 7 pilot projects in 2007 to determine how the NPS could effectively implement key objectives of a Healthier US Initiative focused on the health benefits of physical recreational activity in national parks. One of the 7 pilot project parks was the Timucuan Ecological and Historic Preserve (TEHP) in Jacksonville, Florida. For a complete overview and synthesis of findings of the 2007 pilot projects please see Hoehner et al. (2010). In subsequent years (2008 through 2010) the TEHP program continued with additional emphasis on providing opportunities for program participants to experience the wonder and appreciation of nature as well as discover the ecopsychological benefits of nature associated with a marsh and near-shore coastal environment. The TEHP is located entirely within the city of Jacksonville, Florida. Like many urban environments, Jacksonville contains an undeserved urban and economically disadvantaged community. All cultural and natural history resources within TEHP are influenced by water. Of the 46,000 acres contained within TEHP, approximately 30,000 acres are coastal wetlands created by the mixing of fresh water of the St. Johns River and the salt water of the Atlantic Ocean. The best way to make contact with marshland and near-shore nature within the TEHP is shallow draft, non-motorized watercraft such as kayaking. While many land based sites within TEHP are accessible to members of the local community, the wetland and coastal environment access is severely limited to economically disadvantaged

inner-city youth because of cost and transportation. Ethnic minorities are less likely to participate in outdoor recreation or value government involvement in the provision of such services (e.g., Ho et al., 2005; Sasidharan, Willits, & Godbey, 2005). The level of TEHP visitation and especially kayaking was expected to be very low in this target audience (Shinew, Floyd, McGuire & Noe, 1996; Wolch & Zhang, 2004; Floyd et al., 2008).

Humans have increasingly disengaged from the natural environment with an enormous shift away from rural areas into more urban environments (Axelrod & Suedfeld, 1995; Beck & Katcher, 1996; Katcher & Beck, 1987). Research is indicating that exposure and experiences in nature can improve wellbeing and can help relieve stress (Kaplan & Kaplan, 1990, 1989; Ulrich et al., 1991; Hartig, Mang & Evans, 1991; Kaplan, 1992, 1995, 2001; Lewis, 1996; Herzog & Stevey, 2008). People who go to parks, wilderness areas and rivers visit for many different reasons (Manning, 1999). For example, people float rivers to view scenery, find peace and calm, learn new things, develop skills, escape crowds, exercise, and to be alone (Knopf & Lime, 1984).

Research focused on the relationship between ethnicity and participation in various outdoor nature based recreational activities with regard to the physical health benefits have been carried out (for example: Bass, Ewert & Chavez, 1993; Carr & Williams, 1993; Johnson, Horan & Pepper, 1997; Floyd, 1998; Floyd, McGuire, Shinew & Noe, 1994; Floyd & Gramman, 1993; Floyd, Gramman & Saenz, 1993; Loukaitou-Sideris, 1995; Philipp, 1998; Shaul & Gramman, 1998; Wolch & Zhang, 2004). Few if any studies have focused specifically on the interplay of outdoor physical activity and the ecopsychological benefits of water-based recreational activities with under-served urban youth. In general lower rates of participation by some minority groups are attributed both to limited economic resources and to differences in norms, value systems, and socialization patterns (Floyd & Gramann, 1993). A particularly important segment of this target community is young children and teens belonging to ethnic minorities. It is this segment of the under-served urban and economically disadvantaged community that is most needy of nature-based outdoor recreational opportunities that not only encourage outdoor physical activity but exposure to the ecopsychological benefits of the coastal water based natural environment. Urban environments, especially for those economically disadvantaged can be quite stressful. It is not surprising that

antisocial behavior is a common reaction to stressful situations and spending time in nature or viewing nature appears to reduce stress and may influence the reduction of aggression and violence (Kaplan, 1995). A growing body of research suggests that contact with nature not only positively affect blood pressure and cholesterol but also improve life outlook, and reduce stress and behavioral problems among children (Moore, 1981; Kaplan & Kaplan, 1989; Ulrich et al., 1991; Kaplan, 1993; Frumkin, 2001). A particularly important segment of the Jacksonville, Florida community is young children and teens belonging to ethnic minorities (primarily African American). It is this segment of the under-served urban and economically disadvantaged community that present with the greatest need for recreational opportunities that promote physical activity and recreation and exposure and experience with the natural world.

The TEHP Inner-City Youth Kayaking Program

The TEHP intervention strategy involved developing and establishing a programmed ranger guided water-based nature activity for inner-city economically disadvantaged youth in Jacksonville, Florida. The program provided basic skills and experiences for safe kayaking in the preserve waters. The program was designed to promote confidence in a water based outdoor activity while offering access and exposure to the natural history of marsh and near-shore environments only accessible by water.

The program engaged 129 children ranging in ages 9-17 with a mean age of 12.2 years, in the summers of 2005 through 2010. All of the children were African American and live in subsidized housing communities. Rangers working the program estimated that approximately 65% children had never seen the ocean and 100% never visited the Timucuan Preserve.

Each group 6 to 10 children experienced a single six hour day that included basic water safety, how to wear a life jacket properly, use a kayak paddle, use of a safety whistle, how to enter and exit a kayak, and how to get a kayak to move safely through the water to get from one place to the other. The participants were paired using the “buddy” system. The lead ranger explained to the group the each buddy was to maintain close proximity to the other, check each other for safety and to alert one of the rangers to any difficulties either child might encounter. It was stressed that all participants in the program were to take care of each other.

After about an hour of practice, a healthy lunch and hydration with water, a three hour guided kayaking trip on the waters of the TEHP was accomplished. The trip consisted of paddling through marshland, then through open water to a near-shore sand bar. The children experienced a variety of marshland vegetation and birdlife. In the more open waters they observed oyster reefs, fish and occasionally a dolphin or manatee. At the sandbar the participants observed scurrying crabs, roosting shorebirds and a plethora of sandbar invertebrates. The visits were always done with appropriate interpretation by rangers with an emphasis on leaving little human trace in as least disturbing way as possible. The children then spent time swimming (with life jackets on) and exploring the wonder and simple beauty nature has to offer before returning to their boats for the return trip. At the conclusion of the trip the participants were encouraged to report their discoveries and reflect upon the day's activities. This activity was conducted or monitored by a park ranger with advanced degrees in psychology with environmental/ecopsychological interests.

Program observations, challenges and lessons learned

Contrary to our expectations and the fact that 42% of the participants reported not being able to swim, all of the participants without fail, took an immediate interest in the water and the kayaks once they arrived at the site. No participants resisted getting in the kayaks and paddling after training. Prior to the training and the trip experience, 28% of participants expressed that the prospect of paddling a kayak as exciting (vs. boring) for them, while 24% expressed that the prospect of paddling a kayak as scary (vs. not scary). Some participants stayed close to shore initially; however, every participant eventually paddled with the group. All the children were observed to pay close attention to instructions, consistently helped each other get into the boats, reminded each other to stow gear, drink water, secure their paddle or assisted others when they became stuck in shallow water. Rangers reported that many of the children appeared awed and moved by the exposure to being able to kayak and experience the water environment. All the participants expressed a desire to participate in similar water and nature based activities in the preserve and reported that kayaking was neither boring nor scary at the conclusion of the day.

It should be noted that male participants greatly outnumbered female participants (only 17% were girls). We offered the program to all children regardless of sex, but

did not actively attempt to recruit boys or girls. No obvious differences in behavior between boys and girls in the program were observed with the exception of occasional flirting and minor teasing, but nothing disruptive to the overall program experience was noted. The enthusiasm about their experiences of the day and confidence in kayaking expressed by the female participants did not appear any different from the boys. It would be important in future programs and research to examine why more boys than girls in this population participate. Systematic observations of behavior with regard to gender should also be carried out throughout the program. In general, all participants in this program were open to sharing any apprehensions they may have had and were enthusiastic about the challenges of kayaking and experiencing the natural environment.

While no systematic survey was conducted with participants at the conclusion of the program, based on observed behavior by ranger staff and self-reports of the participants, the children enjoyed the activities, gained confidence in a water-based recreational activity, and gained an appreciation for the coastal natural environment. In addition, letters were received from many of the children expressing how much the programmed was enjoyed. Rangers also reported spontaneous expressions throughout the program such as “cool”, “awesome”, “tight”, “makes me feel calm”, “makes me feel brave”, and “I feel good”.

The scheduling of the programs was limited by the tides and the necessity of avoiding weekend days (due to high motorboat and jet-ski traffic). This constrained the timing of our programming and greatly reduced opportunities for flexible rescheduling. As a result, when hazardous weather presented itself, the program was cancelled and rescheduled which affected how many program could be offered over the summer months. Approximately 10% of the programs had to be rescheduled due to weather conditions.

It was imperative to promote the program at local community centers and through church groups. To this end, we conducted on-land kayak demonstrations in the housing community centers. Funding In addition, we forged good relationships with the community center directors and staff who actively participated in the program themselves who then passed on their positive experiences to the community at large.

Most of the children reported that they would enjoy returning to the park and kayaking but that transportation to the park would have to be provided for them.

We could not reasonably expect the children's family members to have the transportation to the park, which is a 20+ mile drive from their neighborhood with no public transportation available. This finding is consistent with studies that have shown that affordability, transportation and safety are often barriers for low-income households' use of parks for recreation (Scott & Munson, 1994; Moore, 1966). We established the components necessary for forging a strong relationship with partners of the project. We now have a model for setting up the relationships and solidifying the commitment of the partners in the project, namely with regard to the community groups, a kayak tour operator and the park. It is hoped that a community sponsor will emerge who is able and willing to sponsor individual family transportation for a future kayak tour for each former participant of this program.

There is increasing understanding that humans are dependent on nature for emotional, psychological, and spiritual well-being (Wilson, 1984; Katcher & Beck, 1987; Kellert & Wilson, 1993; Roszak et al., 1995; Friedmann & Thomas, 1995; Kellert, 1997; Frumkin, 2001; Wilson, 2001). Ecopsychological understanding of how people from different ethnic, cultural and socioeconomic backgrounds as well as urban, suburban and rural settings interact with and benefit from various elements of the natural world are just starting to be explored systematically. Parks and park rangers can be part the efforts to promote physical health (Wong & Higgins, 2010) and emotional wellbeing by providing opportunities for visitors with diverse cultural backgrounds to form their own intellectual and emotional connections with meanings inherent in the natural world. Systematic evaluation of nature-based ecopsychological intervention programs such as described in this paper might offer insights and generate important research hypotheses and as generate ecopsychological approaches promoting human well-being. Such efforts may also lead to increasing support for environmental sustainability among different ethnic and socio-economic groups.

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