## Observing children's play in Naturescape: Key findings relating to social and environmental interaction

May Carter, PlaceScape, Australia, may@placescape.org.au;

Karen Martin, Lisa Wood, Jacqueline Samson, The University of Western Australia, Australia

Research undertaken in 2010 by the Centre for the Built Environment and Health (CBEH) at The University of Western Australia for Kings Park Botanic Garden and Parks Authority (BGPA) explored child and parent perceptions and preferences relating to outdoor and nature-based play environments. The primary findings of this study (Child's Play) indicated that children desired more interesting and challenging play spaces that incorporated natural elements such as trees, rocks and water. Parents indicated they would like their children to have more opportunities for nature-based play that encouraged physical activity and physical risk, though counter-balanced many of their statements with concerns about safety and lack of access to suitable nature play settings.

Based on these findings, BGPA commissioned an observation study of their newly constructed nature-based activity area. Rio Tinto Naturescape Kings Park is a place for children to connect with nature and learn to appreciate the unique Western Australian environment. It is designed as a place to explore, climb rocks and ropes, wade through creeks, build cubbies and get dirty. It has been designed to retain its bush setting and provides a level of challenge, adventure and connection to nature that is missing from many urban parklands (Botanic Gardens and Parks Authority, 2012).

Over two days during spring 2011, the behaviour of 372 children (accompanied by adults in either family or school groups) was observed within six activity areas. Quantitative and qualitative data was collected by a team of trained observers using a data collection instrument developed specifically for this project. A standardised observational tool was developed by the CBEH research team using previously validated instruments used to record children's levels of physical activity, engagement with others and play environment (Ridgers et al., 2007). Methodologies and outcomes of previous observational studies were also examined to determine how best to record social interaction and behaviours associated with risk-taking in more natural play settings (Sandseter, 2007, Brown et al., 1996). Pre-

vious research and review of related literature conducted by the authors was also used to inform the development of the observational tool (Martin, 2010, Wood et al., 2010)

Particular attention was paid to: observation of the type and frequency of children's interaction with different activity elements; positive/negative environmental interaction by children; positive/negative social interaction between children; sizes of groups playing together; and adult involvement in play. Following the family day, use of the observation tool was reviewed. Site specific tools were developed to reduce the complexity of the original form and facilitate faster, more accurate recording by observers.

In addition, children, parents and teachers were surveyed to gauge children's perspectives of specific activity areas; adult overall perspectives of Naturescape; and identification of potential safety issues. Data collected was used to develop strategies to maximize play and educational opportunities within Naturescape.

Our research findings provide some unique observational data not captured in previously published studies. While a number of studies have observed children in school and other outdoor play settings, we believe this may be one of the first studies to specifically focus on how children play in natural environments. This presentation will provide an overview of the research methods used and discuss key findings, particularly those relating to social and environmental interactions.

Botanic gardens and parks authority. 2012. Rio Tinto Naturescape Kings Park [Online]. Perth, WA. Available: http://www.bgpa.wa.gov.au/education/naturescape/ [Accessed 29 June 2012].

Brown, W. H., Odom, S. L. & Holcombe, A. 1996. Observational assessment of young children's social behaviour with peers. Early Childhood Research Quarterly, 11, 19.

Martin, K. 2010. Putting nature back into nurture: The benefits of nature for children. Perth, WA: Government of Western Australia, Department of Sport and Recreation.

Ridgers, N., Stratton, G. & Fairclough, S. R. 2007. Children's physical activity levels during school recess: a quasi-experimental intervention study. International Journal of Behaviour Nutrition and Physical Activity, 4.

Sandseter, E. B. H. 2007. Categorising risky play – how can we identify risk-taking in children's play? European Early Childhood Education Research Journal, 15.

Wood, L., Martin, K. & Carter, M. 2010. Child's Play: An investigation of child and parent outdoor play space preferences and Kings Park Naturescape. Perth, WA: University of Western Australia.

## The conditions of development and tourism management in Polish mountain national parks included in the "Man and the Biosphere" programme

Joanna Hibner, Jagiellonian University, Poland, joanna.hibner@uj.edu.pl

The "Man and the Biosphere" UNESCO programme was launched in 1974-1976. The concept of the programme assumes the existence of three protection zones: the core zone, the buffer zone and the transition zone. The main 3 functions of the programme include the protective function, the sustainable development function and the educational function. The zone with the highest protection level is very precious from the point of view of environment. Also, it is very sensitive to human impact. The biosphere reserves are under the jurisdiction of the countries in which they had been created (Prato, Fagre, 2005). In Poland there are 4 national parks included in the "Man and the Biosphere" programme: Tatra NP, Babia Góra NP, Bieszczady NP and Karkonosze NP.

One of the objectives of this paper was to compare tourism management methods in selected national parks. Referring to the parks' websites, I have analysed various forms of cooperation between the park management and the tourists, as well as educational and tourist offers of the parks. In each of the parks in question people may only follow specific tourist or educational routes. Moreover, in Karkonosze NP it is possible to paraglide after obtaining a special permit. In Tatra NP people may enjoy rock climbing or speleo climbing. In Babia Góra NP it is possible to make fire but only in places designed for such purpose. Bieszczady NP is the only Polish park that belongs to the PANParks (Protected Area Network) the objective of which is to improve tourism management methods in protected areas (S.P. Cottrell, 2004). All of the above mentioned parks offer educational activities, such as travelling educational routes, lectures, exhibitions and knowledge competitions. The offer of Tatra NP and Karkonosze NP is especially worth noting. Both parks offer a lot of educational activities and organize social campaigns, competitions and workshops aiming at increasing tourists' awareness of the value of nature. Also, these parks organize their partnership with the tourist in the form of voluntary work.

In order to specify the level of the influence of management on tourism, a survey has been carried out. There were 749 tourists involved in the survey: Tatra NP (181 people), Bieszczady NP (198), Karkonosze NP (198) and Babia Góra NP (172). The tourists were asked to evaluate

their partnership with the park management using the 0–5 scale. Also, they were asked if they know the tourist and educational offers of a given park, if they used such offers, and if they browsed through the park's website. In the opinion of the tourists, the offer of Tatra National Park is the best, and the offer of Bieszczady National Park is the worst. According to the survey, most tourists have not heard about or used the tourist and educational offers of a given park. In this regard, the tourists have the best opinion about the Tatra NP and the Karkonosze NP – about 14% people know the offer of those parks but few people used the offer. Most tourists do not browse through the website of a given park (53-62%). On the basis of the above mentioned survey one may conclude that the management does not exert a significant influence on the tourists' choices.

Another objective of the survey was to determine the tourists' motivation. According to the survey, there are a lot of different motives for carrying out tourist activities in selected national parks. The motives have been grouped into a few categories: hiking/recreation, learning about a given place, curiosity, the love of mountains, contact with nature, taking photos, relaxation or other motives. The tourists taking part in the survey could select more than one answer. Most of them specified the following as the main objectives of their trip: the love of mountains, relaxation or hiking.

Also, the tourists were asked about how often they came to a given park, how long they were going to stay, what kind of tourist activities they were going to be involved in and what kind of equipment they brought with them. Moreover, they were asked why they chose that particular national park. The reasons why most of the people chose a given park include: the nature of that particular park, the love of that place, a short distance from the place the tourists live in or the recommendation of the family members. Few tourists got interested in a given national park because of its website, which confirms the theory about the insignificant influence of the management on tourists' choices. The majority of the tourists do not perceive the National Park as the institution that manages the amenities of nature.

Cottrell S.P. (2008), Perceptions, attitudes and perceived benefits of local residents about tourism development in and around European Protected Area Network Parks, The Fourth International Conference on Monitoring and Management of Visitors Flows in Recreational and Protected Areas, Management of Protection and Development, Montecatini Terme (Tuscany, Italy), 14/19 October 2008

Prato T., Fagre D., (2005), National Parks and Protected Areas: Approaches for Balancing Social, Economic and Ecological Values, Blackwell Publishing Professional

28.06.2012, www.tpn.pl

28.06.2012, www.bdpn.pl

28.06.2012, www.bgpn.pl

28.06.2012, www.kpnmab.pl