In 2005 Chester Zoo decided to add a new attraction to its summer programme of educational activities, a theatrical show entitled *Turtles Can’t Fly*. Although the zoo already provides numerous opportunities for cognitive learning, including interactive interpretation and presenter talks, it was thought that those visitors who favour affective learning were less well catered for.

Cognitive learning involves learning knowledge and the recognition and recollection of specific facts, a typical example of which would be knowledge gained from reading exhibit labels. Affective learning involves dealing with things emotionally, such as feelings, values, appreciations and attitudes.
Different people favour different styles of learning. Trying to appeal to the under 9s we aimed to reach children affectively by making them emotionally connect with the characters and the storyline in an attempt to influence their attitudes towards rainforest conservation as opposed to teaching them cold facts.

In particular the show aimed to reach the under 9s. This age group tend to favour active learning (Sotto, 1994 & Wood, 1998), are less likely to read interpretation (Serrell, 1998) and are particularly susceptible to romantic interpretation of animals and the natural world (Kear, 1990).

Theatre is frequently described as having the capacity to bring information to life. Indeed theatre in museums is often referred to as ‘living history’. The vitalisation metaphor suggests theatre’s ability to transform subject matter from the static realm of facts and figures to the affective realm of the imagination, emotion and values. Through a combination of realistic animal costumes (turtle and hornbill characters), and many opportunities for audience participation Turtles Can’t Fly aimed to invoke a sense of wonder and fantasy in children while empowering the audience at large with the message that they could make a difference.

The show ran in conjunction with the 2005 EAZA ShellShock campaign and raised awareness of the endangered status of tortoise and turtle species, with an emphasis on the Philippines where Chester Zoo has a strong involvement with in situ conservation. It was decided that, though a message regarding turtle, hornbill and habitat conservation would underpin the script for the show, the primary aim would be to entertain and in turn encourage children to have a positive emotional connection with the natural world. The underlying mood and tone of the show were kept positive and upbeat to avoid the audience becoming overwhelmed by depressing or negative messages (Beever, 2004).

Evaluation is an essential part of modern zoo education (WAZA, 2005). This was the first theatrical performance to be held at Chester Zoo and it was important that both visitor receptivity to the show and the show’s ability to convey conservation messages were assessed. The findings of this study will guide plans for similar activities in Chester Zoo and also add to the body of existing knowledge informing other institutions considering similar initiatives.

**Methodology**

As with much evaluation of education in zoos, evaluation of zoo theatre is in its infancy and techniques are still being developed (Needham, 1999). This study utilised a triangular methodology using both quantiative methods (i.e. audience counts, audience participation counts) and qualitative methods (i.e. cued questionnaires, and unobtrusive visitor observations). The researcher observed 29 shows (23% of performances in total). 58 questionnaires featuring open-ended questions were answered collectively by family groups.
Results
The show was staged outdoors on the Arara Lawn, a popular picnic site for zoo visitors. An average of 7% of zoo visitors saw Turtles Can’t Fly, with a mean audience size of 163 – close to the carrying capacity of the lawn. The majority of visitor groups sampled were entertained by Turtles Can’t Fly and 94% of these visitors indicated that they enjoyed the show. The positive response to the show was reflected in the level of interaction between zoo visitors and the actors, with an average of 21% of Turtles Can’t Fly audience members directly participating in the show. Participation opportunities were geared to the under 9s and included the actors asking the children to imagine their favourite smells, children flapping their arms to help the hornbill fly and an interactive dance at the end of the show.

Additionally, the actors made themselves available at the end of each show for a photo call. Judging by the queues that formed around the actors, this proved particularly popular with visitors and provided another opportunity to listen in on visitor comments.

Turtles Can’t Fly’s appeal to children was the most frequently commented on aspect of the show, with 55% of visitors highlighting it. Several visitors (19%) commented that though they did not believe their children understood the show’s conservation message this did not prevent the show being highly entertaining for them. The humour, costumes, mass appeal and performance of the actors were all positive aspects of Turtles Can’t Fly commented on by zoo visitors. While the majority of suggestions for improvements were for even more interaction between audience members and the actors.

The questionnaires indicated that despite the fact we had deliberately downplayed the show’s conservation message in order to avoid conservation fatigue in our audience, a high proportion of visitors were taking conservation messages from the show. 86% of visitor groups recognised the specific conservation message the show was trying to convey, that forests are under threat. 40% of visitor groups recognised more complex conservation messages such as the connection between habitat destruction and the extinction of animals. 12% of visitor groups recognised a specific message related to biodiversity.

For example one visitor group when asked about the purpose of the show responded that, “the show demonstrated that animals have an impact on other animals’ lives and that different species of animals are interconnected by the ecosystems they live in.”

Where groups surveyed completed questions in their own words, responses indicated that they were taking the message on board in an affective manner. 41% of visitors wrote at least one affective response related to conservation, indicating by their use of ‘I’ or ‘We’, that they personally felt they had a responsibility to care for the environment and that they needed to take action.

For example, one visitor group replied that the show reminded them, to look again at the Shell-
Shock exhibition in the zoo and to improve their recycling and waste disposal. This is a clear indication of the capacity of performance art to shape visitors attitudes and values in addition to conveying cold facts.

**Lessons learned**
The study reveals that the show was well received, and that visitors took from it a greater conservation message than had initially been expected. However, the study showed us that there was room for improvement in 2006. Previously it has been assumed that if children were entertained by the show then their parents would also be contented. Studies have shown that zoo visitors come to zoos primarily for recreational purposes and not specifically to be educated (Bertram, 2004, Hyson, 2004, Pekarik, 2004, Quæstor, 2004). Feedback from the questionnaires however, indicates that parents expected their children to be educated about conservation during their time at the zoo. In light of this, in future performances at Chester Zoo the conservation message can be made more robust and we can be less concerned about turning off audience members through conservation fatigue.

**References**
Quæstor Research and Marketing Project (2004) ‘We’re all going…(Wave 9)’ Internal report. Chester Zoo

The Ostrava Zoo for disabled children

**by Šárka Kalousková Ostrava Zoo | The Czech Republic**

The Ostrava Zoo was founded around the middle of the twentieth century. It was built at a time when access of handicapped or disabled people was not considered. The current goal is to make the entire zoo as accessible as possible for disabled people. Hence, all new buildings are planned in consideration with the special needs of disabled persons. Additionally, Ostrava Zoo cooperates with organisations specializing in the care of the disabled. The education programme has been adapted to include special lectures for the visually impaired. Disabled children are given the opportunity to christen the offspring of the contact animals used in the education programme. They may also inaugurate smaller expositions and take part in special educational programs.

In the autumn of 2005, interactive items prepared especially for disabled children were installed throughout the zoo. This included ceramic animal footprints with a legend in Braille, new information boards with ‘touch boxes’, a life-size model of a giraffe, a gibbon bench, resting sites, and colour signposts for easy orientation in the zoo area. The majority of these items were created in workshops of the charity organization. With all of these value-added activities, our aim has been to improve the quality of a visitation for any of the disabled people that frequent our zoo.