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The IZE is an association dedicated to expanding the educational impact of zoos and aquariums worldwide.

Vision: Conserve global biodiversity through effective zoo and aquarium education programs.

Mission: Engaging our members worldwide to achieve biodiversity conservation by encouraging sustainable behaviors in people that visit zoos and aquariums.

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## International Zoo Educators association (IZE)

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To submit an article please contact the appropriate regional editor. See website [www.izea.net](http://www.izea.net)

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*Cover photo: School children participating in the Chimpanzee Trust supported Music, Dance & Drama Schools Competition, Mukono District, Uganda. See article page 10-11*



# Stories that go beyond the zoo walls: approaching the community to the wetland ecosystem

Paola Gómez Ovalle, Catalina Rodríguez Álvarez, Daniela Gómez León, Liliana Andrade Lagos

## Abstract

*Sabana Centro is a region that includes 11 towns located near Bogotá, the Colombian main city, and it has many natural wetlands. However, one of the main threats to this ecosystem is the ignorance of the community about wetlands. Recognizing the impact of working with communities, and in alliance with the restaurant Andrés Carne de Res, we formulate and apply an educative project about Sabana Centro wetlands, coordinated with the purpose of the restaurant social responsibility program “Andrés y Lucía”. The project was carried out with 100 children in 12 sessions after which the children were introduced to the wetland ecosystem, including the biodiversity associated and the threats they face. This project is an important component of our educative program intended to strengthen the knowledge of the communities about biodiversity in order to develop a conscious citizenship.*



The Cundiboyacense highland has a great diversity of wetlands in which high Andean, sub-Andean and lowland stands out (CAR, 2011: 42-43). Chía is a municipality belonging to the territory of Sabana Centro with strong influence of the upper basin of the Bogotá river (Universidad de la Sabana, 2015: 52-53); thanks to its geographic conditions, the presence of wetlands was common; however, these ecosystems have now been altered and made invisible due to human intervention and excessive demographic growth, which is also reflected as mentioned by Mejía and Chicué (2014) in the current environmental conditions of the municipality, where the pollution of rivers and problems in the sewage systems are recognised.

## Introduction - Wetlands in Context

The wetland is an intermediate ecosystem between the aquatic and terrestrial environments, with moist, semi-humid and dry portions, characterized by the presence of very unique flora and fauna. The Ramsar International Convention, aimed at the conservation and wise use of wetlands, defines these ecosystems:

*Places that include a wide variety of habitats such as swamps, peatlands, flood plains, rivers and lakes, and coastal areas such as marshes, mangrove and grassland meadows, but also coral reefs and other marine areas whose depth at low tide does not exceed six meters and artificial wetlands such as ponds treatment of wastewater and reservoirs (Ramsar, 2006).*

Taking into account that wetlands are ecosystems that provide multiple environmental services (water flow regulators, biodiversity reservoirs, historical memory, environmental education and ecotourism scenarios, air producers and purifiers, etc.) (CAR, 2011: 11), it is necessary to create strategies of dissemination and rapprochement with the communities that favor their recognition and appropriation by them.

## Educational programs around wetlands.

In order to support processes for the recognition and appropriation of these ecosystems by the children of Chia, Jaime Duque Park carries out environmental education processes in alliance with institutions such as the Andres Carne de Res Restaurant (like



an activity book was designed for the participants to replicate and strengthen the different dynamics performed; in addition, a didactic unit was developed for Sabana Centro teachers, in which activities related to those implemented during the sessions are presented, but they allow the teacher to adapt them according to the context in which they are located.

### Discussion

The educational actions developed by zoological institutions and alliances established with other entities are necessary and important within the communities surrounding them. This is possible if the ideal of working within the institutions is transcended, and a broader action scenario

the present one) that encourage and support the conservation of both wetlands and species with an important ecological value that inhabit it, as spotted gallinule: *Porphyriops melanops bogotensis* (an endemic subspecies that has a large number of free ranging individuals in the lakes of the Jaime Duque Park).

On the other side, the project “Andrés y Lucía” seeks to contribute to the integral development of children with attention deficit and problems in their behavior through art therapy, boosting creativity and exploring multiple skills. In this way, the methodologies proposed in the different sessions sought to be in line with the objectives sought by the project, establishing a link between artistic, recreational, creative and environmental education methodologies.

### Methods

In this experience, we worked with a population of approximately 100 children among 7 and 17 years old, inhabitants of Barrio Santa Lucía in the Municipality of Chia. In particular, they are students with attention deficit and some behavior problems in the classroom. Prior to the sessions development, a diagnosis was made that facilitated the design and focus of the activities that articulated the objectives pursued by “Andrés y Lucía” project. This allowed for a total of 12 themes that addressed the concept of wetland and related aspects (biodiversity, threats, importance, etc.) that were developed over 6 months. Finally,

is established that contemplates the role of communities in understanding the conditions in which their region is located, and the maintenance and care of the local ecosystems, a fundamental aspect in environmental education processes.

In particular, this experience made it possible to highlight the importance of working with children on issues related to the regional context in which they are found, as these are not often addressed in conventional education. In this way, the wetlands, the interactions among its different components and the native biodiversity were the articulating themes that brought the participants closer to their environment. On the other hand, the activities implemented strengthened the capacities in children of creativity and teamwork, and the resolution of problem situations leading to the development of citizen competencies. In turn, this activity helped this population to recognize its territory in different areas and identify the characteristics, importance and threats faced by the wetland’s flora and fauna, both at local and national level.

The activities carried out highlight the exploration that was established with the senses, since the children had to face different situations that were solved only by putting them to the test. At the same time, it was observed that it is not always necessary to have complex material to develop the sessions, but instead simple exercises contribute to generate greater reflections.



## Conclusions

It is critical that communities close to the zoological institutions and their context, are what direct the processes of environmental education that are undertaken from these entities.

In this region, addressing the issue of wetland ecosystems represents a tool for the inhabitants to recognize different aspects of the territory in which they live, taking knowledge as a first step to promote care and conservation.

Within the processes of environmental education it is important to make use of flashy tools for children as in this case. Art, play, creativity in the face of problem situations are allied tools in environmental education processes.

## Acknowledgments

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IZE has published an annual journal throughout its history and this continues to be a key method of sharing practice. However, we are also keen to expand this by developing **online publication** of articles, so keep an eye on the website and Facebook for the latest news and new articles.



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