

RESULTS REPORT

Use of Nature Works Glass Filter Media
in Faunia, Madrid.

Collaboration With
Faunia (Parques Reunidos Group)

 Date of installation: July 3, 2023

 Installation site: Mangrove Area



EXECUTIVE SUMMARY

The following report details the results of the application of Nature Works filtering glass sand in the water filtration system of the Mangrove area of the Faunia animal park (Madrid), home to crocodiles and a wide variety of fish. This initiative was carried out on 3 July 2023 with the aim of improving the quality of the water in the pond and guaranteeing a healthier environment for all the species of fish that live there. The results obtained after 48 hours of application of Nature Works glass filter sand were highly satisfactory.

BACKGROUND

Faunia is an animal park located in Madrid, Spain, and is part of the Parques Reunidos Group, a Spanish group that manages more than 60 parks in the leisure sector distributed in various countries in Europe, North America and Australia. The crocodile pond is one of the park's main attractions and is home to several species of fish, whose visibility and water quality are crucial factors for the visitor experience and the well-being of the animals.



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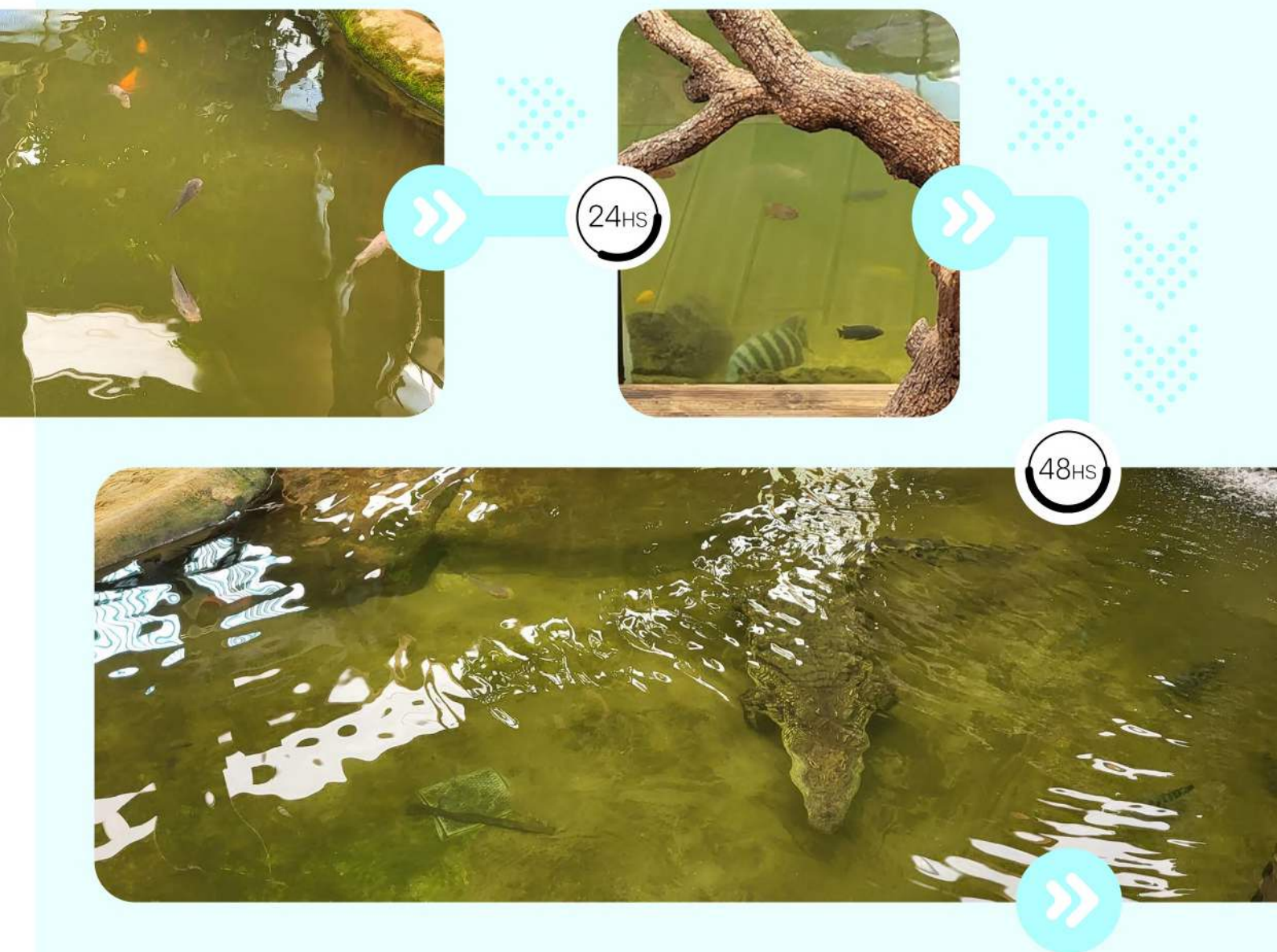
METHOD

To improve the water quality in the crocodile pond, it was decided to implement Nature Works glass filter sand into the existing filtration system. This type of sand was chosen due to its high filtration and clogging capacity and its effectiveness in removing particles and pollutants from the water. After inspecting the installations, a combination of a Stage 0 bed and a Stage 1 filter layer was chosen, in a ratio designed to provide the best filtration while preventing rapid clogging of the filter mass, due to the characteristics of the effluent, with a high presence of organic matter.

The objective was therefore twofold: To achieve the highest levels of transparency for a healthier habitat and better visibility, and on the other hand to reduce the number of filter washes required, with consequent water and energy savings for the Park.

RESULTS

After only 48 hours of application of Nature Works filter glass sand, the following significant results were observed.

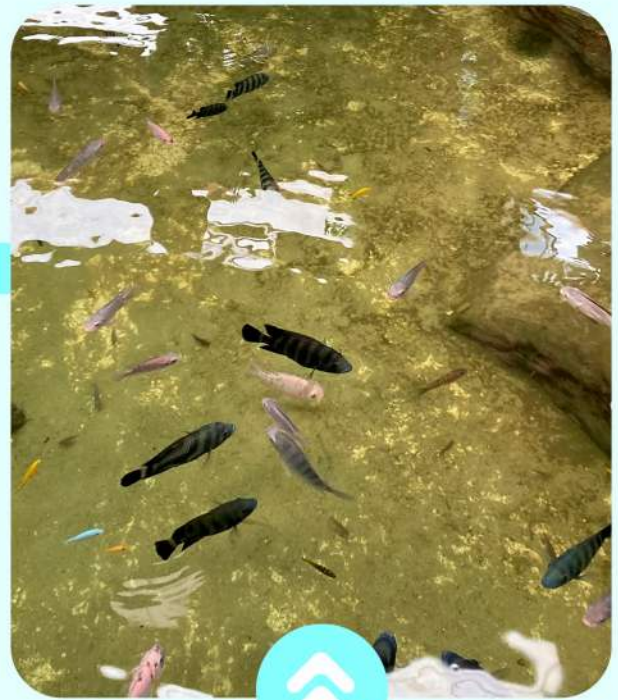


Water clarity: The clarity and transparency of the water in the pond improved significantly. Before the application, the water had a cloudy and opaque appearance, making it difficult to see the fish species. However, after the application and within 48 hours, the water became considerably clearer and more transparent, allowing visitors to observe the fish species more easily.

Visibility of fish species: The improved water quality resulted in greater visibility of the fish species living in the pond. Visitors can now enjoy a more enriching experience by observing the various fish species in their natural environment.

Animal welfare: A positive impact on the welfare of the crocodiles and fish species living in the pond has been observed. The cleaner and clearer water provides a healthier and more comfortable environment for these animals, contributing to their quality of life.

Reduced filter washings required: A higher clogging capacity of the filter mass means more space to accommodate pollutant particles. This makes it possible to lengthen the necessary filter washing cycles, resulting in direct water and energy savings and a reduction in operating hours for the people responsible.



CONCLUSION

The application of Nature Works glass filter sand in the water filtration system of the crocodile pond at Faunia, Madrid, has resulted in a significant improvement in water quality and visibility of fish species. This initiative has proven to be highly effective in clarifying the water and creating a healthier environment for both animals and visitors. It is also a technical improvement by considerably reducing filter washing times, saving water and energy. Faunia remains committed to the constant improvement of its facilities to ensure animal welfare and visitor satisfaction.

Mr. Ignacio Barrio
Conservation Director of FAUNIA

