



INTERNET ARTICLE

Youth explore Wetlands to strengthen environmental stewardship

7 February 2026

Approximately 130 children gathered at the Colbyn Wetland Nature Reserve on Saturday, 7 February 2026, to celebrate World Wetlands Day through an immersive environmental learning experience designed to inspire the next generation of environmental stewards.

This was the 11th year since its inception in 2014; the annual event was hosted by the Friends of Colbyn Valley in partnership with the Agricultural Research Council and several environmental stakeholders. This year's programme was supported by Ocean Breeze Food Merchants, with active participation from the Department of Water and Sanitation (DWS), BirdLife Northern Gauteng, Southern African Young Geomorphologists, WESSA, and representatives aligned with the Ramsar Convention.

Aimed at children aged 8 to 13, the programme combined science, exploration, and interactive demonstrations to deepen understanding of how wetlands function and why they are critical to ecological sustainability.

One of the highlight sessions was presented by Dr Piet-Louis Grundling, who used a simple cardboard landscape model to demonstrate how wetlands form. Learners identified high and low points in the terrain and observed how water moves slowly through vegetated areas but flows rapidly across hardened surfaces before collecting in low-lying zones where wetlands naturally develop. The demonstration provided a clear visual link between topography, water flow, and ecosystem health.

Participants also built simple models illustrating how healthy wetlands capture, filter, and store water, reinforcing their role in flood regulation, water purification, and groundwater recharge.

The Department of Water and Sanitation enriched the programme with practical water quality monitoring exercises. Using the MiniSASS (Mini Stream Assessment Scoring System) citizen science tool, learners examined aquatic macro-invertebrates collected from a nearby stream to assess freshwater health. Guided by DWS facilitators, including Miss Noloyiso Mbiza, the

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children used magnifying glasses and simplified scoring sheets to determine how the presence or absence of certain species indicates pollution levels and ecosystem condition.

Demonstrations on measuring water clarity and understanding how aquatic organisms adapt to environmental changes further highlighted the scientific processes used to protect South Africa's freshwater resources.

A guided walk through the wetland ecosystem allowed learners to observe biodiversity firsthand. Facilitators explained how invasive alien plant species displace indigenous vegetation and negatively impact biodiversity, while outlining collaborative efforts between government departments and research institutions to rehabilitate affected areas.

Wetlands are vital bird habitats, and early risers were rewarded with a bird-ringing demonstration conducted by BirdLife Northern Gauteng. Mist nets set up before dawn allowed participants to observe how birds are safely caught, measured, ringed, and released offering a rare close-up view of the reserve's feathered inhabitants, including species such as the white-winged widow bird.

A newly introduced interactive game further illustrated how invasive alien species threaten indigenous ecosystems, helping children grasp complex ecological concepts through play-based learning.

Another engaging activity involved examining different soil types found in wetland environments. Learners touched and analysed soil textures and moisture content, discovering how soil composition influences vegetation growth and determines whether land retains water or remains dry. These insights strengthened their understanding of the interconnected relationship between soil health, plant life, and ecosystem stability.

World Wetlands Day commemorates the signing of the Ramsar Convention on 2 February 1971, a global treaty dedicated to the conservation and wise use of wetlands. The 2026 theme, "*Wetlands and traditional knowledge: Celebrating cultural heritage*," highlights the deep cultural connections between communities and wetlands, recognising traditional knowledge systems that contribute to ecosystem preservation.

Situated in the heart of Pretoria, the Colbyn Valley Wetland is a hotspot for urban biodiversity and includes rare peat areas, an uncommon feature in South African wetlands. Proclaimed in





June 2014 and managed by the City of Tshwane, the reserve serves as both a conservation area and an important educational and recreational resource for residents.

The event would not be possible without the dedication of environmental professionals, students, volunteers, and community partners who generously shared their expertise. Attendance for school and youth groups was free of charge, ensuring accessibility and broad participation.

By integrating scientific knowledge, hands-on learning, and environmental advocacy, the 2026 Learning About Wetlands event successfully fostered ecological awareness among young participants. More than just a celebration, the initiative reaffirmed a shared commitment to nurturing informed citizens future scientists, policymakers, and leaders who understand the value of wetlands and are equipped to protect these vital ecosystems for generations to come.

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