

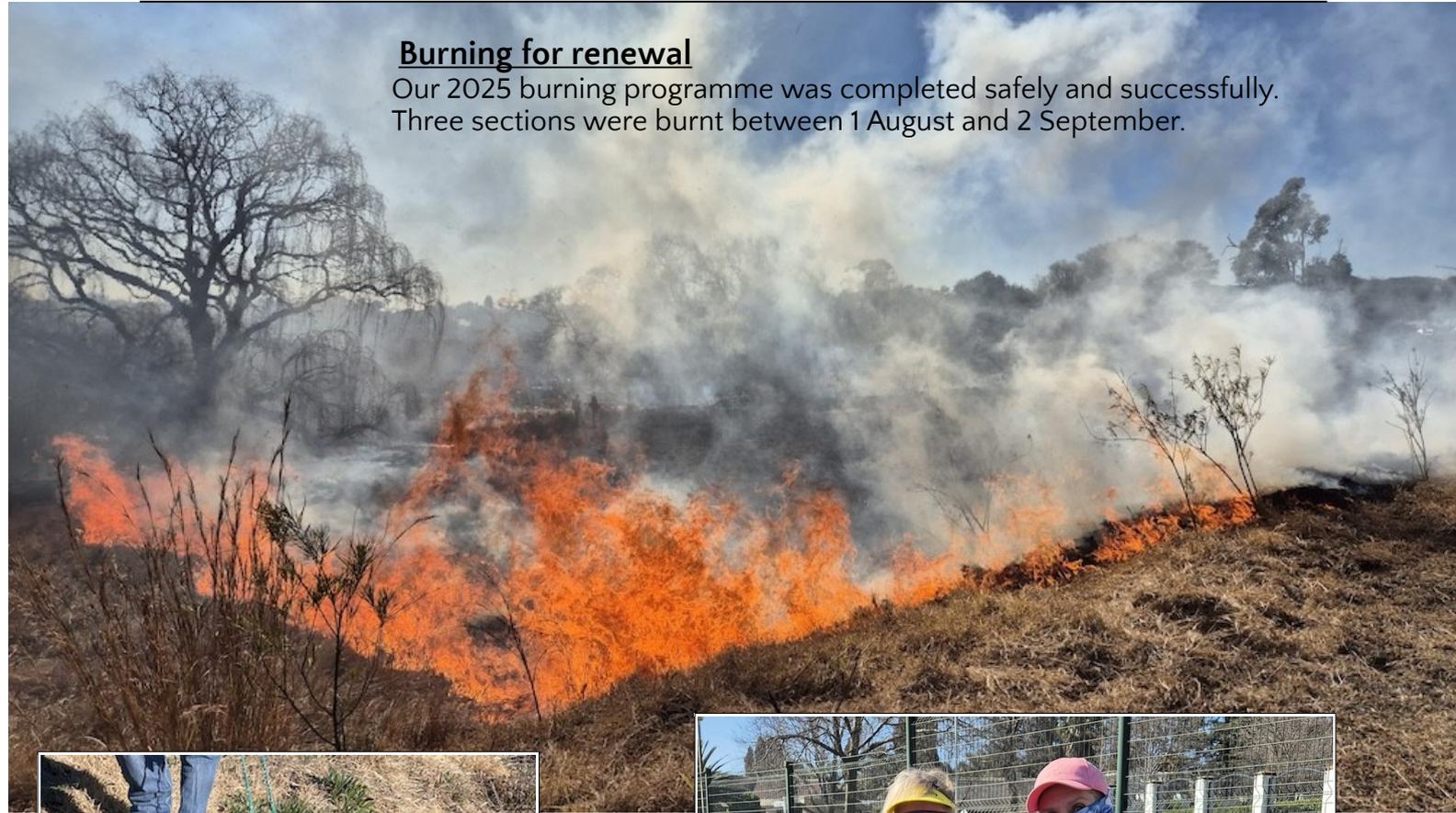


KORSMAN CONSERVANCY NEWSLETTER

WINTER 2025

Burning for renewal

Our 2025 burning programme was completed safely and successfully. Three sections were burnt between 1 August and 2 September.



Essential pre-burn preparation included finding the tortoises and moving them out of the burn area.





At all three burns, guests from Homestead Helpers for Benoni (in yellow) lent a hand. We are passing on our experience for them to manage their own future ecological burns in Farrarmere.

Litter pickups, from land and water



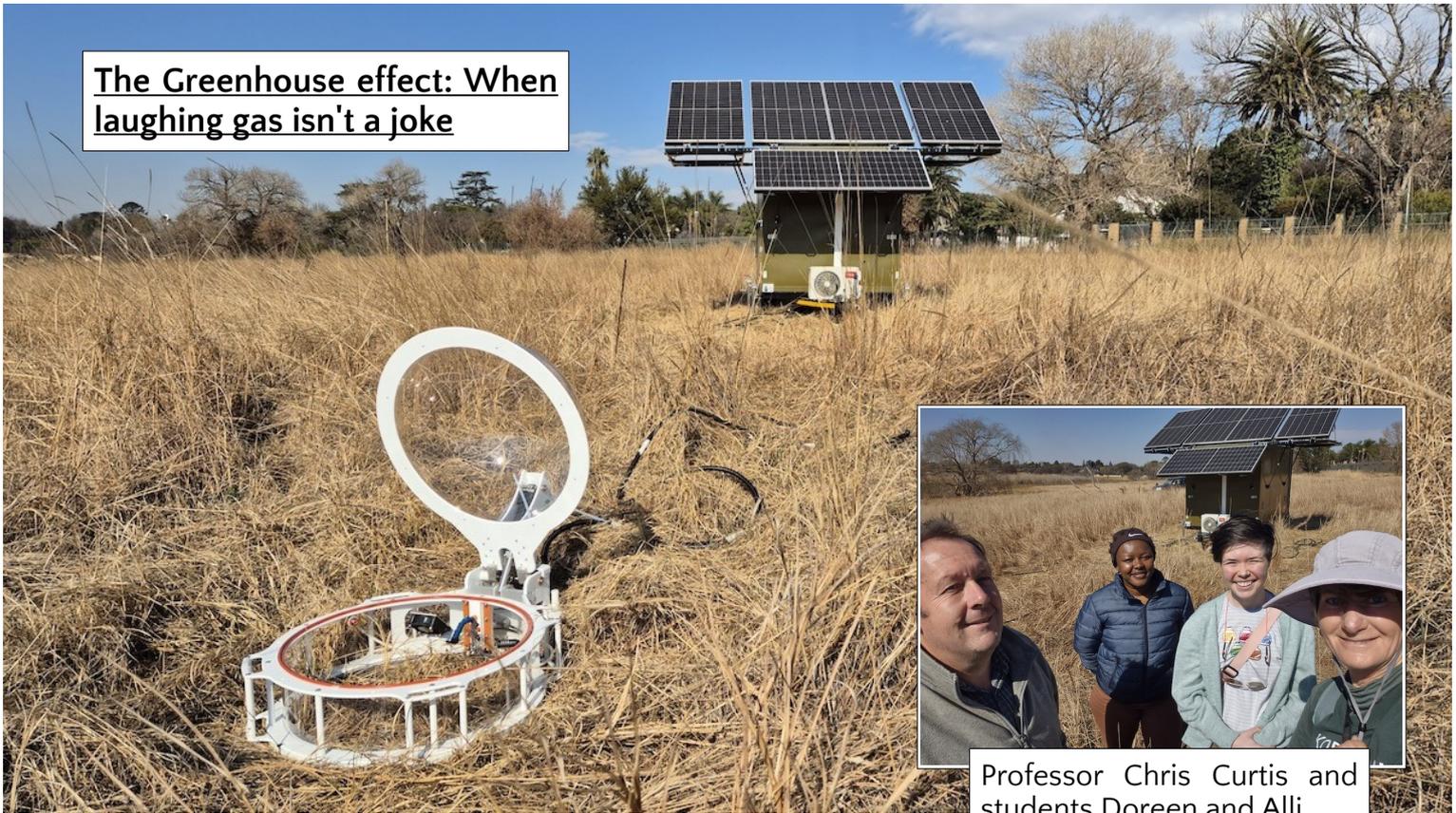
On 17 July, we collected litter as deep as our boots would take us. 'Catch of the day' was a bag containing two portraits of a posing bodybuilder, flexing his muscles.



A few days later, some of us paddled out to collect litter stuck in the reeds, and floating in deep water.



The Greenhouse effect: When laughing gas isn't a joke



Professor Chris Curtis and students Doreen and Alli.

The University of Johannesburg brought their greenhouse gas monitoring trailer back in July, after upgrades to the trailer's solar power. Three chambers that capture gases are placed on the ground at different distances from the water, to get a gradient of greenhouse gases released from the wetland. The chambers open and close automatically.

The sensors monitored methane and nitrous oxide. Nitrous oxide (laughing gas) is the 'unknown' greenhouse gas and is 270x more potent than carbon dioxide for warming the planet. Nitrous oxide is currently the most significant ozone-layer depleting substance being emitted into the atmosphere.

The trailer is the first of its kind in Africa, and Korsman is the first site it has been deployed at. We look forward to hearing the findings of the UJ team.



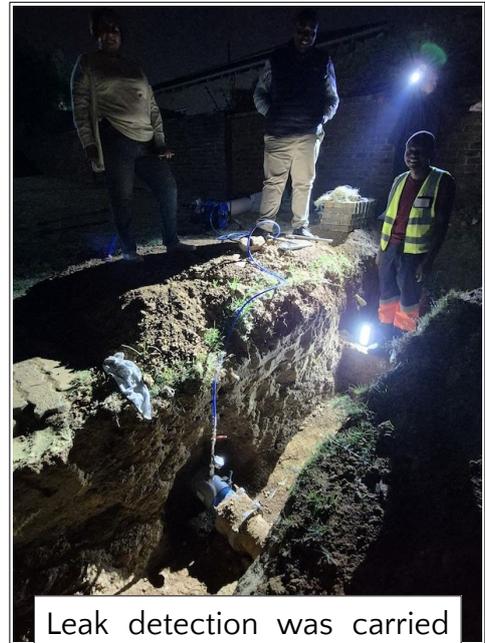
With the trailer's upgrades to its solar power, it is now much heavier. In a smart move (worthy of a professor) Chris Curtis sent the manufacturers to Korsman to remove the trailer. I overheard their team exclaiming at the effort required.

Water level saga

The water level is still extremely high and a great worry with the rainy season about to start. The pan level does not drop during winter because evaporation is usually one or two millimetres a day, and the municipal water leak raises the pan level by at least 1 mm a day.

The water leak from the Woburn Ave bridge is still a puzzle. Ekurhuleni carried out leak detection on the main water lines and neither of them were leaking. This means that there is an unmapped source. We have suggested locating underground pipes with ground penetrating radar. I have quantified the leak water volume as 140 million litres a year.

Water from a leaky pipe along Main Reef Rd, which is in the hydrological catchment, also adds to the volume. The water runs via the storm water channels along the railway line. Ekurhuleni plans to replace the pipe which will also eliminate any possibility that water travels underground to Woburn Ave.



Leak detection was carried out at night. This is gas detection. First the pipe sections were isolated by closing valves. Then the pipes were punctured and gas pumped in, which was monitored for a drop in pressure.

The water pump, which can lower the pan level, still can't be operated as the outlet pipe is broken where it travels across the sewer sump. The metal has been eaten away and the decay extends into the sump walls, so the pipe can't be clamped or cut and welded. The pump station maintenance team is still working on a solution.

Co-ordinated Waterbird Count

We conducted the winter CWAC with Werner van Goethem of the East Rand Bird Club. Although we only counted 320 waterbirds, we recorded 26 of the specified species. This was a low number count, however Stewards Pan and Marievale also recorded low counts. We hope this is not a trend. To follow CWAC data, visit their website <https://cwac.birdmap.africa/>



Six African Swampphens were recorded



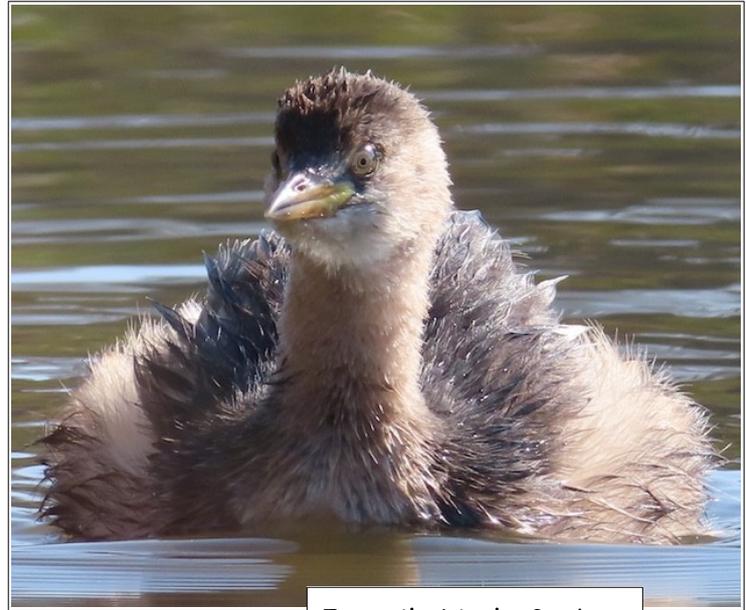
An exciting record was seven Fulvous Whistling ducks. (Photo taken the next day)

Bad Hair Gallery

Like us, our feathered friends can look grumpy on their off days....



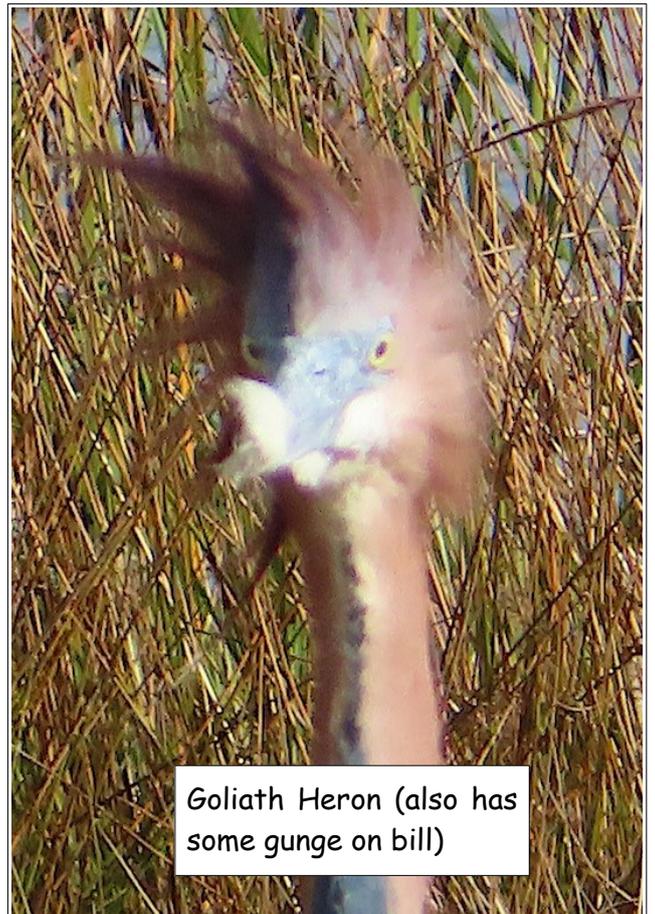
Yellow-billed Egret



Juvenile Little Grebe



Juvenile African Harrier Hawk



Goliath Heron (also has some gunge on bill)



African Spoonbill