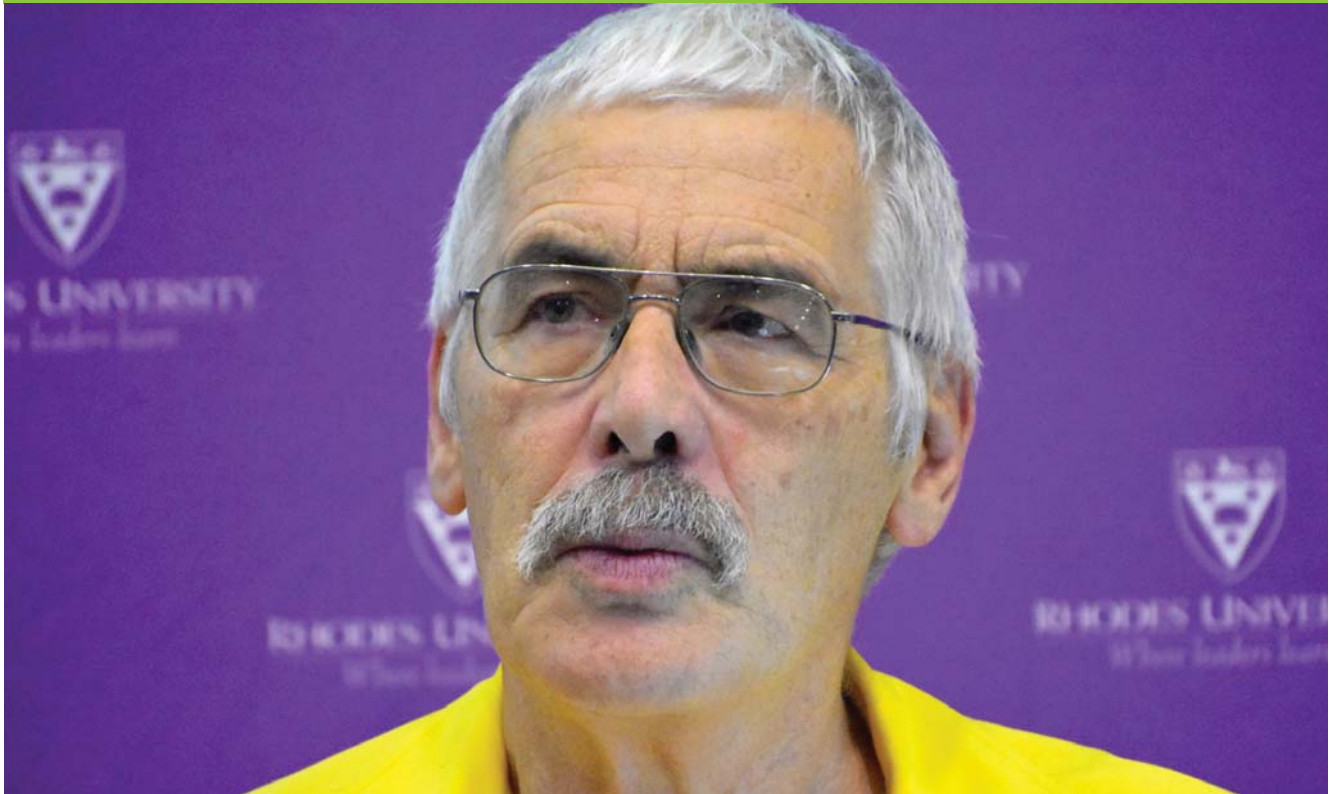


WORKING FOR WATER

Bon voyage to the 'village elder' – WRC wishes Guy Preston well upon retirement

Water Research Commission CEO, Dhesigen Naidoo, Executive Manager, Jay Bhagwan, and Research Manager, Bonani Madikizela, sat down (virtually) with Dr Guy Preston, Deputy Director-General: Environmental Programmes at the Department of Environment, Forestry and Fisheries, who is set to retire this year.

Rhodes University



Preston, who entered government service when he became an advisor to former Minister of Water Affairs & Forestry, Kader Asmal, in 1995, is celebrating a quarter of a century in the employ of government. He is considered the founder of water conservation in South Africa and global award-winning initiatives such as the Working for Water Programme.

At present, Preston is responsible for environmental biosecurity, focusing on the prevention of the introduction of potentially

invasive species into the country, as well as regulating invasive species. He leads 14 programmes, including Working for Water, Working for Wetlands, and Working on Fire, among others, which together provide work opportunities for over 70 000 previously unemployed people.

"Dr Guy Preston is one of the stalwarts of this democracy around water conservation, and of one of the most extensive public works programmes in the world. He has created behind him a

vast wake of capacity, sharing his knowledge, inspiration and zeal for us to move towards a more sustainable world,” noted Naidoo.

When asked about the highlights of his career, Preston immediately mentioned working with minister Asmal. He described Asmal as a ‘significant’ person to work with. “He was very demanding, but had a real commitment [to the sector] and a lovely sense of humour. He created an abundance of opportunity and paved the way for various initiatives. We started more than 50 projects that first year, which was very ambitious, and many of them did not work. But some did get off the ground, such as the National Water Conservation Campaign, with Working for Water as one of the flagship programmes.”

“We had access to people of extraordinary talent in building up that programme, and there are people with great passion,” noted Preston. “It has been just over 25 years since we started, and many of the same faces are still there.” Preston worked for the Department of Water and Sanitation for 16 years before moving over to the Department of Environment, Forestry and Fisheries as it is now known to continue managing his programmes there.

While it was not the case at the time the Working for Water programme was started, the impact of alien invasive plant species on South Africa’s catchments is now well accepted. “Invasives are the single biggest long-term threat to our water security, and we must do all we can to control them,” maintained Preston. Studies by researchers, including Preston’s son, Ian Preston of Rhodes University, have shown that up to 50% of the annual inflows into the Berg River Dam catchment (Western Cape) and De Hoop Dam catchment (Limpopo) could be used up by alien invasive plants over a period of 45 years if they are left uncleared.

Preston proposed that in a post-Covid-19 world, labour-intensive environmental programmes, such as Working for Water and Working for Wetlands, could go a long way towards including previously marginalised people in the mainstream economy, while restoring and protecting valuable ecological infrastructure. “The United Nations is increasingly talking about a Global Green New Deal – aimed at bringing about a more equal distribution of income and reversing decades of environmental degradation. Our programmes have shown what can be done to get as close to sustainability as we can while providing opportunity for employment and skills development.”

A successful offshoot from the Working for Water programme has been the eco-furniture programme, where school desks and other furniture is manufactured from felled alien invasive trees, such as blue gum and pine. “We have put around 700 000 learners behind school desks with this project,” noted Preston. His department was also investing, through its Value-Added Industries Programme, in woodwool cement-fibre board, for use in the construction of buildings. “The properties of this board is extraordinary,” noted Preston. Made from a mixture of invasive plant material (75%), cement and fly ash, the board is

fire resistant, while its thermal and acoustic properties make it a suitable substitute for brick and mortar.

While a close eye had to be kept on known invasive species, such as wattle, gum and pine trees, the country also needed to take note of new arrivals, said Preston. The list of invasive species is ever increasing. New threats are emerging every day as has been shown with the arrival of the Polyphagous shot hole borer beetle in South Africa in 2017. Famine weed (*parthenium hysterophorus*) is another devastating invader establishing itself in the country. A daisy from the Caribbean, it can grow to over 1.8 m high, displacing native species, and each plant can set tens of thousands of seeds per year.

What advice would Preston give young people entering the sector? “Do everything with passion and enthusiasm. It is not easy to achieve the desired results – I remember working 18-hour days. But keep at it because you will reap the rewards.” Preston ends the conversation with some advice to the water leadership of South Africa: “The sustained functioning of our [natural] systems is pivotal to society’s future. We need to invest more in conserving these systems and we need to understand the long-term consequences of the decisions we make.”

Watch the video interview with Guy Preston here:

