

## Queen of the *waterways*

When asked why she took up a career in science, Dr Kath Bowmer, deputy chief of CSIRO's Division of Water Resources, laughed and replied modestly: 'I wasn't all that good at French'. Australia should be grateful for this alleged deficiency, because Bowmer's pursuit of science over the arts has paid great dividends for her adopted home.

The span of Bowmer's interests is remarkable. Among many other things, she has been responsible for research into pesticides in water, the use of wetlands for effluent treatment, and, until July 1993, CSIRO's multi-divisional blue-green algae research program. She has collaborated with scientists from the United States and Czechoslovakia, as well as managers of state water agencies, particularly the New South Wales Department of Water Resources.

Recently, she has worked for the Department of Primary Industries and Energy on assessing the impact of intensive rural industry in the Murray Darling Basin; for the Murray Darling Basin Commission on nutrient and algal bloom management strategies; and for the Commonwealth Environmental Protection Agency on assessing environmental research priorities. She may be best known, however, for her knowledge of herbicides and aquatic weeds.

It wasn't always so. As a nervous newcomer to CSIRO, Bowmer remembers being taken to Albert Park Lake, which was infested with 'some horrible weed'. The powers-that-be were worried about an impending visit from the Queen and they sought advice from the recently arrived 'British expert'. The 'expert', having studied for a degree in agricultural science, and graduated with a PhD in soil science from the University of Nottingham,



Dr Kath Bowmer: an authority on aquatic plants in Australia.

quickly began learning about new crops, water plants and unique aquatic ecosystems in Australia.

In the end the weeds were dug out of the lake, we presume the Queen was adequately amused, and Bowmer went on to become an authority on aquatic plants in Australian ecosystems. This knowledge is now being used for far more significant ends than cleaning up for Queens. Bowmer's work has developed into several aspects of aquatic plant research, with an emphasis on the value of native plants as central features of aquatic ecosystems, and their use in maintaining water quality.

Bowmer recently alerted the government and community to the threat posed by alligator weed to Australia's multi-billion dollar irrigated agriculture industry. This plant, accidentally introduced into Australia from South America in the late 30s, could take over whole aquatic ecosystems, and invade entire areas of irrigated agriculture, particularly 'wet' crops such as rice and irrigated pastures.

Bowmer and colleagues were quick to recognise the implications when alligator weed was found to have crossed the Great Dividing Range. They were also ready with an effective

management strategy based on the use of specific herbicides over several seasons.

Bowmer's knowledge of the management of aquatic alien plants has received international recognition. Twice she has been paid to address aquatic plant management conferences in the US and she has been unable to accept five other offers for fully-funded overseas visits because her schedule is 'too hectic'. Hectic is an understatement.

During the past three years alone, Bowmer has continued personal research into river pollution with agricultural chemicals. This has involved developing biological assessment methods, improving irrigation drainage water quality, and managing a small aquatic plant consultancy group. Simultaneously, she was assistant chief at the Griffith Laboratory, and leader of the Rivers and Wetlands Program of the Division of Water Resources.

Since becoming deputy chief in September 1993, she has had to 'give up sailing', but nothing else seems to have been lost from Bowmer's crowded agenda. In fact, she is delighted to have recently regained her status as one of the 'Feral Joggers' who completed the annual 12-kilometre jog at the 1994 Bacchus Festival.

Bowmer had 'come to Australia looking for an adventure'. As well as the adventure, she found a spectacularly successful career and a husband. She and her partner have two daughters, the elder of whom is studying French. Bowmer is looking forward to a family holiday in Noumea, which will benefit her daughter's language studies. Let's hope Kath Bowmer accepts that one person can't know everything, and has a well-earned rest.

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