

Book Review

***Out of the Scientist's Garden — a story of water and food* by Richard Stirzaker**

There are few more fundamental issues facing humanity than how best to feed ourselves in an increasingly crowded world, and — in Australia especially — what that means for scarce water resources.

Richard Stirzaker has written a fascinating exploration of the realities of turning water, sunlight and nutrients into food. *Out of the Scientist's Garden — a story of water and food* is published by CSIRO Publishing (<http://www.publish.csiro.au/nid/21/pid/6181.htm>).

This elegant, lucid book starts in the Stirzaker family garden on a 877m² block in suburban O'Connor, Canberra. It works from that very local scale through large-scale industrial agriculture to national and global food security issues and back again, always grounded in a profound understanding of the challenges facing food producers at all levels.

In our quest for meaningful and more sustainable options, the Stirzaker garden should stimulate the Australian consciousness as Thoreau's Walden Pond did for Americans — an evocative lens through which to examine and better understand big issues of our time.

In his day job, Dr Richard Stirzaker is a Principal Research Scientist with the CSIRO. He has an outstanding track record in science and innovation as the inventor of a uniquely simple irrigation wetting front detector and CSIRO's 'Clever Clover' kit for vegetable gardens.

First and foremost, Richard Stirzaker is a gardener with a lifelong passion for growing food.

This book unites the scientist and the gardener beautifully, blending the rigour of the scientific method with the sensuality of planting in rich soil and tasting perfectly ripe fruit and fresh vegetables. When Stirzaker suggests that the best way to experience an apricot at its most perfect is to lie under the tree with your mouth open, it is easy to imagine him doing just that.

Out of the Scientist's Garden is a pleasure to read — free of jargon and spare in its use of statistics — without in any way dumbing down very complex issues. It connects food and water in a manner that is all too rare. It makes clever use of the author's double life in Australia and Africa, juxtaposing the problems and possibilities of industrial agriculture with those of small subsistence farmers, home gardeners and water authorities, in responding to the need for more food from less water, less reliable water and poorer quality water. It offers no easy solutions or glib prescriptions, just careful analysis grounded in meticulous empirical observation and measurement.

Stirzaker draws upon deep, hard-won knowledge of his own garden and his family's experiences in that garden — as laboratory, workshop, study, pantry, playground and place for reflection. This is probably the most scientifically instrumented and studied home garden in Australia, visited by many thousands of people through the Open Garden Scheme. What most visitors miss, and this book provides eloquently, is an articulation of the science and philosophy underpinning this bountiful garden.

The book's title is important. Much more has come out of this scientist's garden than the food enjoyed by the Stirzaker household and the impressions gained by visitors. Richard Stirzaker has made wonderful use of a Land & Water Australia Fellowship to reflect upon, distil, and convey in deceptively simple language, the many lessons emerging from his scientist's garden. The on-going experiments are chronicled at <http://www.thescientistsgarden.com/>

There is nothing esoteric about these lessons — they are fundamental for Australians learning how to live better and smarter in a dry land. Whether people think we are experiencing a prolonged drought or a step-shift to a drier climate doesn't matter, in terms of the relevance and value of this work. For Australian households trying to save water, collect rainwater and use grey water on their gardens, and for anyone interested in food and how to grow it, rich insights abound in Stirzaker's distinctive blend of science, passion and practical, grounded experience.

Ultimately, we all have an interest in food and water, irrespective of the extent to which we are aware of the intricate interactions between these two essential life elements.

This is an incredibly important book that deserves to become a classic of Australian agricultural and environmental literature. It should be read widely and carefully by policy makers, by scientists, and above all by citizens everywhere interested in food, water and the environment.

Andrew Campbell

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