

## D.L. Serventy Medal 2005: Citation

### LESLEY AND MICHAEL BROOKER

For over thirty years Michael and Lesley Brooker have been contributing to the Australian ornithological literature. For much of their working lives, they were employed by CSIRO's Division of Wildlife Research (now Sustainable Ecosystems). In the late 1960s, with Mike Ridpath, Michael studied the Wedge-tailed Eagle, then of concern to the sheep industry. Theirs is still among the most thorough and often-quoted research on that species. Michael moved to Canberra in 1974, where he was mostly involved in fauna surveys. Returning to Perth in 1984, he continued survey work, looked into the impacts of wildfire on birds and other animals, and studied the conservation value of remnant patches of native vegetation. At the same time Lesley joined the Division as a database manager and computer modeller. Among other work, Lesley developed methodologies for the re-design and restoration of agricultural lands for the conservation of declining species of birds.

Together the husband and wife team turned their attention to cuckoos, Blue-breasted Fairy-wrens and avian population ecology, particularly in fragmented landscapes. It has been this recent period of their lives that has been extraordinarily productive in terms of ornithological publication. In the past 15 years, they have published some 44 papers.

Their joint work on cuckoo evolution, population ecology of fairy-wrens and spatial dynamics of birds in fragmented habitat is widely admired. An article in the prestigious international journal *TREE* by James Smith and Jessica Hellmann (2002) has this to say about the significance of their research:

'Many ecologists believe that fragmenting habitats into discontinuous patches disrupts the reproduction, survivorship and movement of animals. It has seldom, however, been possible to measure all these processes in one study. Recent work by Lesley and Michael Brooker on an Australian songbird, the Blue-breasted Fairy-wren *Malurus pulcherrimus*, has achieved this elusive goal. Their new paper in *Wildlife Research* (Vol. 29: 225–233) demonstrates that reduced connectedness among habitat patches lowers population recruitment to below break-even levels.' ... 'The Brookers' work achieves what conservation biologists have long been seeking: quantitative evidence for the impact of habitat fragmentation on realworld populations.' ... 'The Brookers' study also reminds us that reliable conclusions come only from intensive study over several years.'

Lesley and Michael Brooker have been significant, long-term contributors to Australian ornithology. As well as through their many published papers, they have contributed to Australian ornithological publication in other ways. Michael was an assistant editor of the *Emu* (1990–2000) and, from 2001–2003, Lesley served on the *Emu* Advisory Committee. Much of their bird work has been carried out privately. Recently retired from CSIRO, they both plan to continue to study and publish on cuckoos and their passerine hosts, and declining birds in Western Australian wheat belt.

Smith, J. N. M., and Hellmann, J. J. (2002). Population persistence in fragmented landscapes. *Trends in Ecology and Evolution* 17(9), 397–399.

Penny Olsen

