

ECOLOGICAL INTEGRITY

Creating an eco-house and garden was a labour of love ... and a legacy for future generations

Words & photos: Gordon & Marie Rowland



In 2002, we sold our Sydney house of 19 years and bought 10 hectares (25 acres) of partly cleared wet-sclerophyll forest adjoining Wallingat National Park at Pacific Palms on the mid north coast of New South Wales. It was one big step towards the vision we shared: an eco-friendly house and garden in harmony with nature.

We hired a local earthmover to upgrade the forest track to a driveway; excavate a lagoon/wetlands and a safe spillway downstream from the wide swamp/slow-moving creek crossing the property; adjust creek entry from upstream to prevent run-off and siltation; and extend the treed knoll to create an island retreat for birds about 600mm above water level to escape flooding. We specified varying water depths, from 200mm for wading birds to six metres for diving birds, and as a retreat for native fish during periods of high temperatures and low water levels.

After browsing the Australian Institute of Architects' website (www.architecture.com.au) and speaking with several architects, we hired Sydney architect Kevin Snell, whose designs and eco-credentials stood out above the others. We discussed with him the house we had in mind:

- Modern, unpretentious, low-profile, functional, energy-efficient
- Independent of fashion, fads and the

architecture of bygone eras and other cultures

- Bushfire safety features integral to the design
- Earthen/mud brick and weatherboard construction, with a Zinalume roof to reflect heat and plantation or recycled timber windows and doors
- In visual harmony with the surrounding landscape

- Centrally located open-plan kitchen/dining/living area, opening to a wide verandah with overhang to screen summer sun and admit winter sun
- Orientation between 30° east and 15° west of true north (depending on land contours) for maximum solar gain
- Passive solar design and through-flow ventilation to control temperature and



An egret enjoys the newly created lagoon and wetlands.



No chemical insecticides or fungicides are used on plants.

reduce the need for active heating and cooling

- Slow-combustion heater, underground rainwater tank and reed-bed waste-water system.

After completion of the lagoon and driveway in December 2003, we hired an eco-aware local builder, the Sugar Creek Building Company's Bruce Brown. Bruce's team laid the foundations in July 2004 and completed the house in March 2005.

We have since revegetated with about 2000 local native trees and shrubs, mainly scattered along previously cleared sections of the north and south boundaries. These provide wildlife corridors into Wallingat National Park and screening from neighbouring properties.

In 2006, we turned our attention to the gardens, starting with the south-facing front entrance garden. After deep ripping the clay base, compacted during construction, we mixed the stockpiled clay-loam topsoil with grit, horse and chicken manure and worm castings, and then re-laid it. To screen the visitors' car parking area and provide a sense of enclosure, we then installed a timber fence and lined it with a natural, fire-resistant cladding product, Natureed®.

During the laying of the house foundations, a buried pipe and electric wiring were installed, running from the lagoon to beneath the house, the pipe emerging in the front entrance garden. From here we dug a dry creek bed that winds through the garden to the far end and around the house to the lagoon. It always looks attractive and serves as an effective means of above-ground drainage during periods of high rainfall.

With the lagoon end of the pipe attached to a waterside pump, the flick of a kitchen switch brings water splashing into the creek from a hidden "spring". The water flows through the creek before returning to the lagoon. It's a favourite feature with visitors, particularly



The grandchildren delight in the now lush garden areas.

our grandchildren, Ben and Olivia. It also cools the air and brings colourful dragonflies and frogs — including tiny green tree frogs — and other wildlife. And it's an easy way to water nearby plants during establishment and prolonged dry periods.

After we'd spread a coarse mulch layer and lined the creek with crushed rock and pebbles, we installed our first garden plant, *Cyathea cooperi* (scaly tree fern) next to the creek. Since then, we've installed many more plants, with more to come during the next few years.

To impart a relaxed ambience and sense of unity, and for ecological integrity, we plant mainly local and bio-regional species. These all thrive without chemical fungicides or insecticides and attract many native songbirds

including birds that feed on insects. With such an abundance of insectivorous birds and frogs, we are seldom bothered by mosquitoes.

We're both passionate about uniting aesthetics with biodiversity and conservation and we seize every opportunity to promote a wider, deeper appreciation of local and regional natural heritage. Our aim is to leave a legacy of timeless beauty for our children, our children's children and future generations of Australians. ■

Gordon Rowland is managing director of Indigenous Landscape Design Australia; Marie Rowland its researcher. For more information and photos on this project, and to view the garden plants list, visit their website: www.ilda.com.au



Tree ferns flourish in this eco-friendly garden environment.