## Earthsong Eco-Neighbourhood— Rebuilding Community within the City

By Robin Allison

urn off busy Swanson Road in the western suburbs of Auckland, leave your car in the carpark to walk between clusters of houses into the heart of this urban community, and you find yourself in an oasis of calm, beauty, and abundance. Neighbours stop for a chat on the path, children race past on their tricycles, and the loudest sound you hear is the birdsong. This is Earthsong, home to 69 adults and children in 32 homes nestled amongst gardens, paths, and a village green on only three acres of land.

Earthsong is an eco-neighbourhood based on the twin principles of cohousing and permaculture. The founding vision, still strongly held by residents today, has three equal components: sustainable design and construction, respectful and cooperative community, and education by demonstration. At Earthsong we are relearning the skills and benefits of belonging to a community, and rebuilding a healthy interdependence with each other and with earth.

Launched at a public meeting in 1995, the project grew as people joined and worked together over several years developing the foundation agreements of effective group procedures, legal and financial structures, and site and design criteria. In 1999 they purchased the land (a former organic orchard), then worked with consultants to design the whole development, and contracted with builders to build the project in stages. While the first residents moved into their homes in 2002, the last homes and siteworks weren't completed until 2008.

Communities such as Earthsong add another layer of belonging into the standard suburban model—a layer of community relationships and governance, that doesn't reduce our personal autonomy in our own homes but adds the enormous richness of a cohesive neighbourhood within the more impersonal wider suburb and city.

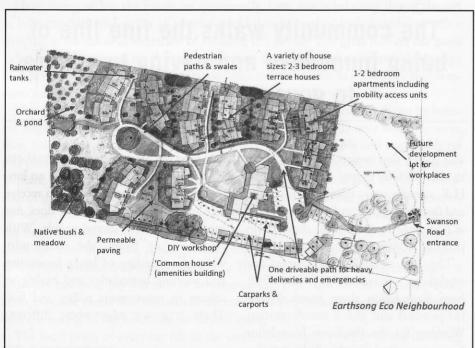
## **Design for Sustainability**

What makes Earthsong an eco-neighbourhood? Earthsong itself doesn't have the shops, businesses, school, or other facilities suggested by the term "village," so we are happy to be known as

a housing neighbourhood. However we are a short walk to the shops, library and community facilities, bus stop, and train station of our local suburban centre.

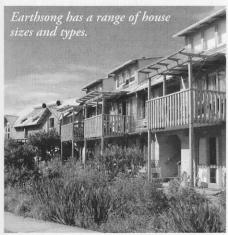
Within our neighbourhood the site layout, buildings, and services are designed to work with the natural landform and climate. Rammed earth and natural timber give the houses a solid and timeless feel, with plenty of windows to let the sun warm the coloured concrete floors for passive solar design. Solar water heaters, nontoxic materials, natural oils and paints all add up to lowenergy and healthy houses.

Clusters of two-storey attached dwellings are arranged along the common pathways and shared courtyards, surrounded by old fruit trees and lush new plantings. Homes range from one-bed-











hotos courtesy of Robin Alli

room studios to four-bedroom houses to suit all ages and different household types. Easy gradients on all paths allow full accessibility, and seven single-level houses are designed for those older or less mobile.

Roof water is collected for reuse in the homes. Surface rain water flows into densely planted swales (shallow dish drains) beside the paths, and down to the large pond, home to frogs and ducks, reducing water runoff from the site. A comprehensive permaculture site design includes gathering nodes and children's play areas, vegetable gardens, native bush and orchard areas, water management, and composting.

We couldn't include everything we wanted at the time of building due to cost or regulatory obstacles, so we built in the ability to upgrade later. There are cables inside the walls of each house to assist later installation of photovoltaic panels, land area is set aside for more water tanks, and networks of spare conduits in the ground allow for future

internet upgrades. Sustainability includes affordability, and our approach has been to achieve as much as we could across the full spectrum of environmental and social sustainability and to be willing to let go of perfection in any one area.

## **Community Aspects of Sustainability**

What we have learnt at Earthsong is that social and environmental sustainability are complementary and mutually reinforcing. Many of the sustainable design aspects of our neighbourhood were made possible not only in *addition* to a social and cooperative structure, but *because* of our social cooperative structure; the two have always gone hand-in-hand.

One example is our car-free neighbourhood: we place a higher importance on our relationships with one another than with our cars, so we designed the carparks at the edge of the site. This has both social and environmental benefits—land area that would otherwise be driveways or road is freed up for productive gardens and community living space, for children to play safely and neighbours to interact as they come and go from their houses.

By sharing resources, we have access to increased facilities and "common wealth" while we use less overall. At the heart of the neighbourhood is the common house, our much-loved community building owned jointly by all the house-holders and providing shared spaces including the large dining/meeting hall, sitting room, large kitchen, childrens' room, guest room, and shared laundry. The individual houses are well-designed but compact (100 square meters for a three-bedroom home) because they don't need a spare bedroom for occasional guests, or a living room large enough for large parties or meetings. Even eco-friendly construction uses significant energy and materials so building smaller houses and having shared facilities makes good

environmental sense.

Living within a diverse and supportive neighbourhood makes it easier for individuals to make low-energy, sustainable choices. With good systems of management, equipment such as lawnmowers, garden tools, and workshop tools can be shared. Carpooling and car sharing are much easier to organize and manage when we already know and trust one another.

Working alongside my neighbours on a cooking team for a common dinner or a working bee in the garden is a great way to build the social glue of relationships that maintains community. Cooperation also happens on a daily informal basis, from child-care arrangements to moving furniture or watering the garden when a neighbour goes away. It's all about building connections between people and valuing the sense of belonging.

Another powerful way that being part of a cohesive community can facilitate environmental responsibility is that we learn from each other. Designing ecofriendly buildings and neighbourhoods is an important first step, but the behaviour of the occupants is at least as significant when it comes to the overall impact. It takes extra effort to live a more sustainable life, to resist the gravitational pull back to doing things the "normal" and therefore easier way, but in community we can help each other with information, support, and accountability.

One example is electricity use, which can vary widely even between identical houses with similar numbers and ages of inhabitants, because of the habits and behaviour of the residents. As a cooperative neighbourhood we can facilitate

behaviour change in a number of ways, through information exchange and education, sharing ideas and tips about how to manage the systems more efficiently, internal pricing plans that reward low users and discourage high use, built-in feedback mechanisms, and accountability by making individual house use transparent to all. All of these mechanisms are in place in some form at Earthsong, with the result that 32 homes and the common house are functioning with an electricity supply of the size that usually supplies six houses in New Zealand.

"Through living at Earthsong," one resident told me, "I have become aware of permaculture and have seen it work in practice. With the support of neighbours I am now implementing permaculture principles in my garden."

"My education focused strongly on decision making and producing 'optimal' results," another said. "Our consensus decision-making process here at Earthsong makes me realise how much learning we lose by reducing decisions to numbers. In the beginning I just wanted to get done with the rounds and the meetings; now I value them for providing insight in the thought processes and mindsets of my neighbours."

And another: "I buy much more organic food for myself because it seems strange to live in a healthy house on a certified organic property and fill the fridge up with non-organic food."

## Eco-Neighbourhoods within Eco-Cities

Earthsong has become a catalyst in the rejuvenation of the wider suburb. The

front portion of our site will be developed as eco-friendly shops and offices, to link the housing with the wider neighbourhood, enhance the adjacent commercial centre, and provide work opportunities for both Earthsong residents and the wider community. Several residents have been deeply involved in local community development projects, working towards a more socially, culturally, and environmentally sustainable suburb or "ecovillage."

Like a healthy organism with healthy organs made up of healthy cells, sustainability needs to operate at all levels: the individual, the household, the neighbourhood, the village, and the city. A flourishing, sustainable "eco-city," by definition, would include many flourishing, connected ecovillages and neighbourhoods, of an appropriate scale to encourage cooperation and healthy relationships. It is increasingly apparent that we are all part of one vast, complex planetary system or organism, and econeighbourhoods and villages offer fertile environments to re-learn the skills of interdependence and cooperation that will contribute to the health of our beautiful earth home.

An architect, Robin was the initiator and development coordinator and is now a contented resident of Earthsong Eco-Neighbourhood (www.earthsong.org.nz). She is a fellow of the New Zealand Social Entrepreneur Fellowship, and is profiled in the recent book How Communities Heal. Her chapter is available at tinyurl. com/hchallison. Contact robin.allison@earthsong.org.nz.



