



Meaning and design of nature for the urban built environment

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POSTER ABSTRACT:

Aidanfield (Christchurch): Low Impact Urban Design and Development (LIUDD): matching urban design and urban ecology

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The low impact urban design and development programme is one of the current New Zealand ‘sustainable cities’ approaches focusing on Auckland and Christchurch cities with links to Melbourne (Australia) and Vancouver (Canada).

The low impact urban design and development concept actively involves many landscape and urban ecology approaches. For example one of the tasks of LIUDD is creating systems of ‘stepping stones’ and green corridor systems, that can lead native birds back to cities. LIUDD is also encouraging “reintroduction of native biodiversity and capturing traditional ‘problems’, such as storm-water, for reuse”. This programme calls for alternative, cost-effective design and development approaches that involve designing with nature - creating community environments that respect, conserve, enhance by natural processes (for example rain-gardens, “going native” and “plant signatures”)

Ecological Design Studio is run by the Landscape Architecture Group, Environment, Society and Design Division at Lincoln University. As part of the LIUDD programme Landscape Architecture students had an opportunity to explore different ways of practical solutions related to design with nature.

The case study site used for Ecological Design Studio was **Aidanfield subdivision**, one of the newest Christchurch suburbs.

This project helped to understand the value of urban ecology, the production of wildlife habitats, economic development through the improvement of neighbourhood property values, the improvement of neighbourhood social interaction, and aesthetic enhancement leading to a positive local sense of place. In addition this project was intended to offer a replicable model of how to analyse the roles of urban ecology for urban design.

The tasks for the projects were:

1. Create a system of green corridors between Aidanfield and surrounding ecosystems. Corridors are often used to provide pathways for the dispersal of plants and animals and to retain other ecological and landscape values.

2. Propose ecological design solutions for Aidanfield (conceptual design)

- Identification of opportunities and problems
- Create a vision of “ecological design” and “low impact urban design and development” for a new subdivision

3. Propose planting signatures for Aidanfield

The plant signature concept was developed by Robinson (1993). A plant signature is ‘an abstraction from the actual place or plant community, but it is a composition that offers some essence of the place’. These planting’s must provide new ‘ecological’ solutions for the design at a detailed level (front and back yard of private gardens, street planting, road planting, public gardens, parking etc).

We are presenting different design solutions for Aidanfield by the following students:

Frazer Baggaley

Charlotte Cameron

Antonia Guthrey

Angela Newall