

Edible boardrooms & allotments in the sky

Steve Jones and **Dave Richards** make the case for green roofs

When the idea of a roof garden at Reading International Solidarity Centre (RISC) began to take shape, it was a practical response to the problem of a leaking roof and how to provide sound and heat insulation for a conference hall which doubled as a venue for noisy events. From this seed of an idea grew a forest garden – food-producing, low maintenance, no-dig – based on a natural woodland ecosystem. It was designed to be an educational tool for raising awareness of global issues, including sustainable development and the economic and historical importance of plants.

Planting was completed in Spring 2002 and the garden is now well established. In an area of 200 m², over 120 species of perennial plants from around the world thrive in soil only 30cm deep. The garden supports a range of layers, from roots, through small shrubs to our miniature version of a canopy layer. Most have multiple uses: food, medicine, fuel, fibre, construction, dye, scent.

The garden demonstrates many ways we can all reduce our environmental footprint. Features include: composting of kitchen waste from the Global Cafe, irrigation using harvested rainwater pumped by renewable energy from a solar array and wind turbine, use of recovered soil and recycled newspaper, wood, stone and plastic in its construction.

Suddenly we found ourselves the object of unexpected interest – a procession of journalists intrigued at finding an unexpected oasis amid the busy roads, shops and offices of central Reading, and a Country in Bloom Award for most innovative garden. We also discovered we are part of an international network of



aerial gardenistas... a Japanese professor delegated a student to make a visit, an email from Baghdad sought advice, visits from local authority planners... all coming to learn and share. In many parts of the world roof gardens are not a novelty, but a solution to pressing urban problems. Over 40% of German cities offer financial incentives for green roof construction and the International Green Roof Institute was opened in Malmö, Sweden in 2001 to research and promote roof greening.

The garden in spring 2004. The hard landscaping incorporates many examples of renewable and recycled materials – decking is made from local wind-blown oak, hurdles from locally coppiced hazel and compost bin from recycled plastic.



In Britain planners, architects and developers are just waking up to the potential of putting soil and plants on top of buildings.

Green roofs (particularly the intensively planted kind found at RISC rather than the more common extensive sedum mat) are huge sponges, prevent flash flooding (50-80% of rain is absorbed). They cut power consumption for heating and air-conditioning, reduce the albedo effect of buildings and also help to break up the distorted ecology and heat islands created by cities. They absorb atmospheric and noise pollution and become vital oases for insects and birds, providing habitat and refuge. A roof garden is a means to re connect a building with the landscape that surrounds it and creates a dynamic relationship between internal and external activities. We become slightly different people when sat in garden, more relaxed and less formal – it creates a valuable meeting place for people.

So we have become evangelists, promoting intensive roof gardens to anyone who will listen. Between May and October, when the roof garden bears its fruit and hums with life, they need little persuasion that the time of the hanging garden has returned.

Steve and Dave have been involved in the development of the RISC roof garden from concept to reality. They have set up **Sector 39 Sustainable Design** which provides landscape and planting design and construction services for forest gardens on roofs and *terra firma*.

www.sector39.co.uk

t: 0845 456 5312

e: steve@sector39.co.uk

dave@sector39.co.uk

photos, top: Paving made from re-constituted stone and recovered brick flanked by carved limestone capitals (originally used in Reading Abbey which was quarried following the dissolution of the monasteries) discovered during the refurbishment of RISC. *centre:* During the summer harvested water is used to irrigate the garden through a drip-feed system, using energy from a photo-voltaic array and wind turbine. *bottom:* The crushed leaves of pineapple sage have a strong fragrance and make a refreshing tea.