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Cover photo: Springhill Cohousing, Stroud, England

TOPIC

To research sustainable community and town centre projects in the United Kingdom, Europe and North America.

To study both the environmentally sustainable design features of these projects, and the processes by which they are engaging the wider community in awareness and action on sustainability issues. To visit both new mixed-use zero-carbon town centre projects, and existing town centre regeneration projects, where local communities are active in building community awareness, skills and projects to address environmental issues.

My intention was to learn about other leading edge sustainable projects, establish networks, and link what we have achieved at Earthsong Eco-Neighbourhood with the work of others in the wider global context.

Why is this important?

There is little doubt that the scale of environmental problems becoming apparent will require major changes to our homes, cities and systems. Action is required from all levels of society, from national and local government to neighbourhoods and individuals. With information and support, individuals and communities can take significant steps to reduce their environmental footprint and create more flourishing social and physical environments.

While the design of towns, buildings and services is obviously intrinsic to creating more sustainable human habitation, the values, knowledge and behaviour of the people that inhabit them are at least as important. It is my firm belief that social and environmental aspects of sustainability must be considered together, and that each aspect contributes to and supports the other.

The most effective changes are those that not only allow a sustainable future but actually <u>improve</u> the quality of life for both humans and the natural world.

KEY RESEARCH QUESTIONS:

- 1. <u>Best examples:</u> What are some important examples of leading edge sustainable townships and communities that address both environmental and social sustainability?
- 2. <u>New projects:</u> What aspects of design and construction are being used in new projects to create environmentally sustainable townships, neighbourhoods and communities?
- 3. <u>Retrofit projects:</u> How are existing town centres and neighbourhoods retrofitting for significant improvements in environmental sustainability?
- 4. <u>Engaging community</u>: What are some key effective processes by which the wider community is engaged in awareness and action on sustainability issues?
- 5. <u>Education</u>: How are leading-edge sustainable projects utilising their experience to inform, inspire and educate the wider community?
- 6. <u>Community regeneration:</u> What strategies are existing urban neighbourhoods using to improve social outcomes and rebuild community within the neighbourhood? (This question was added during the course of my travels).

METHOD:

My research topic was broad, and I visited many projects and communities over my three months of travel. There are a huge range of different approaches to both environmental and social sustainability, and I wanted to get a feel for the scope of different ways that people are addressing these issues.

I compiled a list of relevant projects to visit through talking with colleagues, searching the internet or following up leads as I travelled, and contacted the projects beforehand to set up visits. At several of the projects I was able to join an organised tour for a general overview before talking with someone in more depth. I stayed two or more nights at several communities and was thus able to talk with several different residents and get a better feel for how the community functioned. I also gave presentations about Earthsong Eco-Neighbourhood whenever I stayed in a community, and this opened up conversations about the similarities and differences between the projects that helped to build the picture.

Most of the projects also have a detailed website containing information about their history, philosophy and key processes, although only those websites written in English were useful to me.

The following section summarises some of the aspects that answer the specific questions, and name key aspects of the projects that are particularly relevant. More detailed descriptions of each project are to be found in the section following the travel diary.

ANSWERS TO QUESTIONS:

1. What are some important examples of leading edge sustainable townships and communities that address both environmental and social sustainability?

I was particularly interested in township or village-scale projects that included awareness of and efforts towards both social and environmental sustainability, in the full mix of commercial, community and residential buildings that make up a village. While I saw many pieces of the jigsaw puzzle, I didn't see any one project that encapsulated all the aspects I was looking for.

Of the projects I visited that included both social and environmental sustainability in their vision, the best examples were as follows:

Urban retrofit intentional community and regeneration of existing community: *Los Angeles Ecovillage*

Urban new-build housing, with some community aspects: *BedZED* Rural new-build intentional communities: *Findhorn, Sieben Linden*

2. What aspects of design and construction are being used in new projects to create environmentally sustainable townships, neighbourhoods and communities?

I found myself less interested in the technical details of materials, design and detailing, than with the broader design issues of how people interacted with each other and the environment. Given the different climatic conditions and different availability of materials and products, these construction details seemed less relevant to New Zealand, and are also well documented elsewhere.

However, as a broad overview, I found an emphasis on very high levels of insulation, southfacing glazing (the solar direction in the northern hemisphere) for passive solar gain, and use of local and recycled materials where possible (*BedZED, Hockerton*). Earth roofs with succulents (sedum) or grasses were popular in many places to reduce rainwater runoff and for roof insulation (*Hockerton, Findhorn, BedZED*).

Heating was obviously a larger issue in the United Kingdom and Europe than in New Zealand, and the larger projects had some form of Combined Heat and Power (CHP) boiler usually running on wood chips, that both generated electricity and provided hot water and/or house heating to nearby houses (*BedZED, CAT, Allmende Wulsdorf, Sieben Linden*). These seemed to be often problematic, and need to be of a larger scale than these communities required to justify the maintenance and attention required. An interesting consequence of the use of these plants is that I saw few solar hot water heaters, both because the hot water needs were met by the CHP plant, and because low winter light levels in these climates made solar water heaters less useful.

Many projects had arrays of photovoltaic panels (PVs) to generate electricity from the sun, usually assisted with government subsidies. Some also had their own wind generators, feeding excess power back to the grid at more desirable rates than are available in New Zealand. Germany and Denmark had many wind generators dotted all over the country and out at sea, and generally had subsidies available for the installation of small systems. Generating renewable energy at a local level is a higher priority in these countries than it is in New Zealand, as an alternative to the nuclear and thermal power stations that are the norm.

Rain water collection and/or overland stormwater systems were common and generally trouble-free in the eco-villages and communities I visited (*BedZED, Springhill, Sieben Linden*). A range of wastewater treatment systems, from dry composting toilets (*Sieben Linden, Moorwiesengraben*) to community scale treatment systems (*Findhorn, BedZED, Hockerton*) were being used. These all required ongoing effort for running and maintaining the systems, and were seldom trouble-free.

Some projects have put particular effort into providing options and incentives for people to reduce their car use. Some provide few or no parking spaces on site for residents' cars (*LA Ecovillage, BedZED*), provide electric charging points and charge less for electric car carparks (*BedZED*), or run a car-share system (*BedZED*). Bicycles were in use wherever I went, in all shapes and sizes and with various luggage spaces or trailers for transporting children or goods. Some projects had set up successful community businesses supplying, building, and maintaining bicycles (*LA Ecovillage, Christiania*). Bicycles worked particularly well in cities and in combination with a good train service. Findhorn compensated for the lack of good public transport by having its own fleet of buses to make the trip between their two campuses and the local town of Forres.

3. How are existing town centres and neighbourhoods retrofitting for significant improvements in environmental sustainability?

Most of the urban retrofit projects that I visited had social regeneration as their main focus, with environmental issues coming a poor second if considered at all.

The exception was Los Angeles Ecovillage (*LAEV*), which has a comprehensive vision of both urban social regeneration and environmental sustainability. They have kept the environmental aspects at the forefront of every stage of rehabilitation of their existing buildings, using recycled, non-toxic, locally available materials where possible and local labour. Every available outdoor space has been turned into flourishing gardens for food production as well as outdoor living. Under the influence of *LAEV*, the public street outside

has been narrowed to slow traffic and allow street plantings, and the footpaths have been repaved with permeable paving for rainwater absorption. The residents have also been active in turning a narrow lane nearby into a small neighbourhood garden, with bio-swales for stormwater treatment.

4. What are some key effective processes by which the wider community is engaged in awareness and action on sustainability issues?

An inspiring example of community engagement is the *Transition Town* concept in the UK, which addresses the twin issues of peak oil and climate change by encouraging local towns to implement a range of practical and connected initiatives. This concept is currently being implemented in many towns, villages and cities around the UK and the world, and is described more fully in the project descriptions.

For *LA Ecovillage*, the key is long-term commitment to their local area and continually organising activities and educational events that encourage local people to care for their neighbourhood and each other. These include festivals, street art, street tree planting, and being good and active neighbours to the diverse people in the surrounding area.

Another aspect that is important is the nurturing of fledgling businesses that are based on principles of social justice and sustainability. A successful enterprise in, for example, manufacturing or maintenance of bicycles, shows not only that there is a market for eco-friendly products, but raises awareness of local people, makes the products more accessible and normal, and provides the support for locals to use the products e.g. to use bicycles more frequently as a viable transport option.

Nurturing fledgling businesses is what centres like the *Melting Pot* do so well. Shared resources, collegiality, networking, advice, and reciprocal use of services all help to create a flourishing "ecosystem" of businesses with compatible social justice and/or sustainability ethics.

5. How are leading-edge sustainable projects utilising their experience to inform, inspire and educate the wider community?

Of the projects I visited, those most focussed on education and outreach used a variety of methods to educate. Some projects were set up primarily as a great day out for the whole family, with impressive displays, interactive tools, art-with-a-message, children's areas and healthy and ethical food (*Eden Project, Heligan Gardens, CAT*). They were entertaining and informative at the same time. They had a range of levels of information, from clear attractive signage and working models, to free one-page information sheets on specific aspects, to comprehensive libraries accessed from the web. *CAT* also offers both short and long courses either on-site or as distance learning, and is currently constructing an impressive building to house their expanding post-graduate training programme as well as research and hands-on workshops.

Intentional communities such as *Findhorn* and *Sieben Linden* have a range of mid term volunteer opportunities, where people learn by living and working alongside long-term residents. Often these volunteers pay a fee to cover their food and board, while also donating their time to working on community projects. People travel back to their own localities and help to spread the learning. *Findhorn* has been particularly successful at this, having hosted many thousands of people from around the world over the last 30 years and seeding the practise of spiritual connection with the natural world, and the care for the environment that is a natural step from this, into many different contexts around the world.

State-of-the-art eco-building projects such as *BedZED* and *Hockerton Housing* schedule regular tours to explain their design and systems, and also hold workshops on specific topics.

As part of the development of the **Transition Town** concept, a training programme has emerged in Totnes to help resource individuals interested in starting a project in their area. The two-day Transition Town training, which I attended in September, is a powerful introduction to the concept, and gives hope, inspiration and support for people to start positive actions in their own areas. This has led to the development of a 4-day Training the Trainers workshop to build up a pool of trainers able to offer these introductory 2-day trainings. A direct outcome of my visit to the UK was my subsequent organising of a Train the Trainers workshop in Auckland in January 2009, led by the two Totnes trainers, which has helped to inspire, inform and resource the Transition Town movement in New Zealand.

6. What strategies are existing urban neighbourhoods using to improve social outcomes and rebuild community within the neighbourhood?

Although not my primary focus, I found several very inspiring projects in disadvantaged urban areas where local community organisations had developed strategies to rebuild community, and address health, housing, employment and other social issues within the community. The two key organisations in each area were a strong Housing Association and a Development Trust.

Housing associations in the United Kingdom are independent not-for-profit bodies that provide low-cost "social housing" for people in housing need. Any trading surplus is used to maintain existing homes and to help finance new ones. A feature of Housing Associations is that, although the larger Housing Associations usually have paid staff, a committee or board of management made up of volunteers has overall responsibility for the work of the organisation. A board might include residents, representatives from local authorities and community groups, business people and politicians. (from Wikipedia)

Although Margaret Thatcher's era is largely reviled by the people I met, one useful initiative brought in during her time in office was a measure whereby a housing association could be formed in an area and the state tenants of that area could hold a ballot that, if successful, would see ownership of the buildings transfer to the housing association.

Development Trusts are community enterprise organizations which fulfil 4 basic criteria:

- 1. They address the social, economic and environmental needs of a local community i.e are very local and broad-based organizations
- 2. They are independent, community-owned and managed, with democratic governance by local residents and with a volunteer base.
- 3. They are enterprise-focussed, being at least 10% self-funded and developing a range of enterprises to become more economically self-sustaining.
- 4. They work in partnership with public, private, and community organizations.

Development Trusts are informed by a belief that community regeneration which is achieved through community owned enterprise is the way to build strong and sustainable communities.

Development Trusts are supported by the Development Trusts Association. The DTA advocates on behalf of all their members, provides training and peer learning, access to collective deals such as insurance, and runs a national conference that brings the groups together for networking and peer learning. The DTA is of most benefit to middle-sized

organizations, with the larger more established organizations having less need for collective representation. New fledging organizations need the most help, but DTA doesn't have the resources to mentor them all.

Tom Black of DTA Scotland (<u>www.dtascot.org.uk</u>), who I talked with, emphasized the huge social and economic benefits of local communities <u>owning</u> their own buildings and other assets, a theme I found repeated constantly in my travels. Owning the buildings allows community control over maintenance and renovation. Assets can be used as security to borrow funds, allowing local communities to determine and control the development of new housing and facilities, and allowing progress towards greater independence and emotional ownership. Needless to say good management and accountable systems are essential.

Leading examples that I visited of disadvantaged local areas working to regenerate community through housing associations and development trusts are *Cordale Housing Association* and *Linthouse Urban Village*, both in or near Glasgow, and the *Sunlight Development Trust* in Kent. All of these projects are firmly rooted in the local community, are involved in physical upgrading of existing buildings and, in Cordale's case, development of new buildings, as well as small community-led activities. They serve as a focus and hub for activities that help to reconnect neighbours with each other and create a sense of pride and belonging in the neighbourhood. While the emphasis in all of these projects is on community regeneration with little or no emphasis on environmental aspects, there is huge potential to incorporate environmental initiatives within the overall focus of healthy communities.

I believe this combination may hold the key to implementing more sustainable practises in existing communities. People who feel a sense of control of and responsibility for their local area are much more likely to extend this to their local environment. With adequate funding and support from local and central government to implement more sustainable practises, local communities could be encouraged to consider environmental regeneration as a logical complement to community regeneration. These two aspects are reinforced by the *Transition Town* model.

FURTHER LEARNING

Sustainable Habitation Patterns

As I travelled I became increasingly aware of the patterns of villages, towns and cities, and the obvious differences between those which developed before the age of cheap oil and those based on the abundance of cheap oil.

In Los Angeles, outside of the central city, the grid pattern of low rise buildings stretches on forever, covering the plains and spilling over into the neighbouring valleys. From the air it is a grey, dull expanse, with the only visual relief from the relentless grid provided, ironically, by the freeways snaking through. On the ground, roads are like rivers that you cross at your peril unless the traffic lights stop the flow. I had to walk for miles in the inner suburbs to find the few basic items I needed to buy. I spent 2 days in the mega-highrise central city looking for the heart of Los Angeles, and am still not sure I found it. The streets stunk of urine in every corner, and it was easy to feel lost and of no consequence.

Arriving in London was a complete contrast. Everything felt smaller, more compact and more vertical, busier, more alive. The cars are smaller, the streets are narrower, buildings crowd together and rise several stories high, even the buses are 2 story! The streets are bustling, vibrant and full of life, and the buildings are full of character. Again I stayed in the inner

suburbs, but here I found the few items I needed in local shops all within a few steps of each other. Though crowded and busy, inner suburban London has a human scale that feels as if people belong.

London is surprisingly also leafy and green. Here they achieve a very high density of people living in 4 or 5 story walk-up apartments, surrounding small local parks which provide a green and pleasant outlook and shared open space. Nearly 40% of London's 1600 square kilometres is occupied by green space or water, in private gardens, parks, allotments and wildlife areas. While 14% of households already grow some vegetables in their garden, it is easy to see how this could increase hugely if the will and necessity arose to produce more food within the city. (Source of data: Mayor's State of the Environment Report 2007)

Out of the cities, the theme repeated in different ways. Flying over rural USA, the houses were dotted far apart from each other, as if each was trying to get as far away from others as possible.

What a relief it was to fly over the west of Germany, and see the aesthetically beautiful pattern, repeated across the country, of tightly-clustered houses in small villages, surrounded by a pattern of small but intensively farmed fields, with forested areas between those providing a deep green boundary and linkage with the neighbouring villages. Villages were around 3 - 5 kilometres apart, allowing many more transport options than the car. Many towns had a small cluster of 5 or 7 wind generators on a surrounding hill.

I saw this pattern repeated all over England and Scotland also; small tightly clustered villages, with houses and shops all within walking distance, enough fields and open space around them to supply most of their food, and with woods and wildlife habitats in between. Cars had definitely arrived after the village circulation pattern was established, and had to fit into the existing pattern - though sometimes this results in some very tight spots!



At Findhorn I attended a talk by Christopher Mare, an architect from Seattle studying urban morphology, or the pattern of cities, and in particular how existing patterns of cities will cope with the changes required as oil becomes more expensive and less available. He talked of Europe being based on a village substructure, even though this has been overlaid and surrounded by an oil-dependent pattern, and therefore being in a better position than most of North America (or New Zealand) when urban areas will have to shrink back to a more locally-based pattern.

His studies of the theory and examples of successful towns and villages lead him to suggest an ideal size of 5000 people for an urban village, being enough to support a wide range of services and facilities but still allow a sense of identity and participation. He advocates dense centres of commerce and housing within these urban villages, becoming less dense towards the edges but with a clearly defined boundary and green belts between for food and forestry much as I saw in Germany!! These urban villages could in turn be made up of "ecovillages" of around 500 people, and several urban villages could together form an "eco-city". This matches my long-held belief that a much more viable and sustainable pattern for a city is to have layers of governance and identity, with several eco-neighbourhoods like Earthsong together making up an eco-village or eco-suburb, within a city of eco-suburbs, and each layer making the decisions pertaining to that layer. This is the antithesis of the current plan for Auckland to dissolve vibrant communities-of-identity into one huge super-city.

I was also privileged to stay with Bill and Sheila Berrret in Ilkley, Yorkshire. Bill is an architect and was one of the visionaries for the early design of Milton Keynes, a model city built in the 1960s north of London. His concept was for many pods or villages of 5000 people, surrounded by green belts and linked by trains to the central city area. A network of paths for pedestrians and cyclists was to have complemented the road network, with every house no further than a 7 minute walk to the train, and opportunities for employment were built in from the beginning. Unfortunately the central government took over the project and the village pod concept was dropped in favour of a grid pattern, but many other useful features were retained.

Balancing Core Values and Income Generation

An ongoing issue for environmental activists and eco-communities is how to balance working within their values and passion for the environment, and still earning a fair living. Often there seems to be an assumption that because you are passionate and committed to the environment, you will contribute your skills for free or very low cost, or host visitors to your hard-won projects purely for the satisfaction of sharing with them. Many of the people who currently seek out this knowledge and experience are themselves on the edge of the economic system, valuing quality of life over a high income, and therefore less able to pay the high fees associated with most other training opportunities. I struggle with this dilemma personally, and we struggle with it at Earthsong.

There may be a parallel here with the undervaluing of the environment generally; that until recently there has been no value placed on clean water and air, no costs built into a product to pay for pollution mitigation or the effects of dumping waste. These things have been seen as free and limitless, and therefore we have used them without care.

Projects such as **BedZED** and **Hockerton** have taken a business-like approach, with standard fees for regular scheduled tours, and associated consultancies charging professional fees for advice or one-off visits. Communities such as **Findhorn** and **Sieben Linden** cater more for those willing to exchange time for skills, with volunteer programmes

where people pay for the privilege of staying in the community and contributing work while learning skills. Those who stay longer are paid subsistence wages. *Findhorn* also runs one week courses at relatively high fees, drawing participants from all over the world for most weeks of the year, and longer eco-village training workshops as part of the Gaia University network. Even with the income from these fee-paying courses, the money is always a struggle.

These communities are now having to consider how to care for increasing numbers of their members who are reaching an age where they need support, people who have given many years of their life to the collective economy of the community for subsistence wages, but who haven't been paid enough to put money aside for their own retirement. This is a microcosm of the wider societal issue of supporting an aging population.

External Funding

Central and local government support in promoting and supporting sustainable buildings and communities certainly facilitates the uptake of these ideas. Cheap loans for high insulation levels in new homes (Germany), grants for PV installations (UK & Denmark), and building regulations requiring high levels of sustainable building (UK, Germany) all contribute either "sticks" or "carrots" to encourage better building practises.

Hamburg is the leading city in Germany in promoting ecologically sustainable and community living. They want more housing to be built in the area, and see the benefit of promoting more sustainable housing. The city holds a fair every second year on the theme of cohousing and other forms of community living. Groups promote their projects to potential residents, and businesses and consultants promote their products and services to cohousing projects. Government subsidies are available to middle to lower income people and people with children to help them into home ownership.

The UK has recently recognised the importance of addressing climate change by setting up the Climate Challenge Fund, principally to support *Transition Town* and similar initiatives. In Scotland funding was granted last year for three paid staff to set up Transition Scotland, to support local groups, help raise awareness of climate change and actions that can be taken to reduce energy use, and assist the growth and establishment of transition initiatives in Scotland. While this is a national government fund, local authorities could also be seen as natural funders of Transition Town work, because the transition model addresses many core council concerns such as community regeneration and long-term planning for transport, water, waste and other services.

TRAVEL DIARY

DATES	NAME OF PROJECT	LOCATION	CONTACT	BRIEF DESCRIPTION	PAGE
7 – 12.8.08	Los Angeles Ecovillage	Los Angeles, USA	Lois Arkin, Lara Morrison	Intentional eco- community, urban regeneration	14
19.8.08	Development Trusts Association	Edinburgh, Scotland	Tom Black	Social Enterprise	7
21.8.08	Cordale Housing Association	Renton, Scotland	Archie Thomson	Social Enterprise, urban regeneration	17
22.8.08	Linthouse Urban Village	Glasgow, Scotland	Ingrid Campbell	Social Enterprise, urban regeneration	19
23.8 – 3.9.08	Findhorn Foundation	Forres, Scotland	Jonathan Dawson	Intentional eco-community	21
27.8.08	Urban Morphology	Findhorn, Scotland	Christopher Mare	Lecture	10
4.9.08	Social Enterprise Fringe Forum	Edinburgh, Scotland		Social Enterprise	25
4.9.08	Melting Pot	Edinburgh, Scotland	Claire Carpenter	Social Enterprise	26
9 and 11.9.08 12 –	Hanham Hall, HTA Architects Transition Towns	London Totnes,	Scott Cracknell Naresh	Eco-housing development Community	27
17.9.08		Devon	Giangrande	engagement for sustainability	20
19.9.08	Eden Project	St Austell, Cornwall		Demonstration project	32
20.9.08	Lost Gardens of Heligan	St Austell, Cornwall		Demonstration project	30
22.9.08	Bristol TT	Bristol	Peter Lipman	Community engagement for sustainability	
23.9.08	Ashley Vale	Bristol		Self-build community	
24 – 26.9.08	Springhill Cohousing	Stroud	Max Comfort	Intentional cohousing community	33
27.9.08	CAT Centre for Alternative Technology	Machynlleth, Wales		Demonstration centre for sustainable technology	35
29.9.08	York Environment Centre	York	Zena Bernacca	RA Presentation on Earthsong	
30.9.08	Bradford University "Ecoversity"	Bradford	Peter Hopkinson	RA Presentation on Earthsong	
1.10.08	Hockerton Housing	Newark, Nottingham	Simon	Intentional eco- community	37
6.10.08	Sunlight Development Trust	Gillingham, Kent	Paula Gill	Social Enterprise, urban regeneration	39

8.10.08	BedZED Beddington Zero Energy Development	Wallington, London		Eco-housing development	41
10 – 13.10.08	Sieben Linden Ecovillage	Poppau, Germany	Michael Wuerfel	Intentional eco- community	43
15.10.08	Dyssekilde Ecovillage	Torup, Denmark		Intentional eco- community	45
16.10.08	Svanholm	Denmark		Intentional eco- community	46
18.10.08	Christiania	Copenhagen, Denmark	Irma Clausen	Intentional community	47
20.10.08	Aegidienhof	Lubeck, Germany		Semi-Intentional community	49
21.10.08	Siedlung Kiel- Tries	Kiel, Germany	Ute	Intentional community	50
21.10.08	Alte Gartnerei	Kiel, Germany	Falk Munchbach	Intentional eco- community	51
21.10.08	Moorwiesen- graben	Kiel, Germany	Julia Jacobs	Intentional eco- community	52
22.10.08	Allemende Wulfsdorf	Hamburg, Germany		Intentional community	53
25.10.08	Hong Kong Social Forum	Hong Kong	Hoi Wai Chua	Social Enterprise	55
27.10.08	Economics of climate change	Hong Kong	Lord Nicholas Stern	Lecture	56

Los Angeles Ecovillage:

LA Ecovillage (LAEV) started in 1993 after the riots race sparked by the Rodney King verdict (when LA police were acquitted for beating up black motorist Rodney King), at a time when many people were leaving LA for easier locations. Lois Arkin had lived in the multi-ethnic neighbourhood only 3 miles from downtown LA for 13 years, and had been planning with others to build a state-of-the-art rural ecovillage with the full gamut of eco-building, solar systems, internal money systems, etc that many have dreamed of over the years. Instead she made a decision at that time of great social unrest to stay in LA and work within her local area, to redefine the 11 acre 2-block working class neighbourhood as an "eco-village".

For the first three years she and others focussed on building community with the existing residents, making a conscious effort to meet and talk with their neighbours. They invited the local kids to a street lunch, gave them a variety of fruits to try, engaged them in conversation about what they liked and what they could grow, and over time got the kids engaged as "tree stewards" planting and caring for fruit trees on the street. They instituted "positive gossip", learning as much as they could about the good things that local people were doing and spreading that to others, linking people and creating a sense of connection between them. They held neighbourhood meetings, asking people what they saw as the strengths and weaknesses of the neighbourhood, and what could be done to change that.

An earthquake in 1994 saw another general exodus from LA and property prices plummeted. Those with the vision of transforming the existing area into an ecovillage realised they needed to own property to make any further progress. In 1996 the non-profit community development organisation CRSP (Cooperative Resources and Services Project) that Lois had formed in 1980 managed to raise enough funds (mainly through loans from people wanting to invest in ethical sustainable projects) to buy a run-down 2-story apartment building of 40 studio units, and later another building next door with 8 larger units. Existing tenants were allowed to stay, and some still co-exist today with the 32 members of the intentional community. The original vision for transferring ownership of the land to a community land trust and the buildings to a limited equity housing trust to secure the ongoing non-profit ownership, is only now coming close to realisation.



In 1996 the courtyard, surrounded on 3 sides by the U-shaped 2-story apartment block that is the centre of the village, was grass. Now, after much care and attention, the courtyard is a lush green oasis of calm. 18 varieties of fruit tree share the small space with chickens and vegetables, compost bins and solar cookers, the only reminder of the inner-city location being the constant roar of traffic in the background. Both buildings were in disrepair and have required major renovation, and this is carried out where possible by upskilling members of the ecovillage. Eco-materials such as bamboo flooring and recycled tyre flooring have been used where possible.



Members of the intentional community live in the main building and the one next door, with their own small apartments opening off internal corridors. A spacious lobby serves as a communal sitting room, and one of the apartments upstairs is used as the common dining room and kitchen. Organised activities include shared dinners and a community meeting once a week, but there is also much casual interaction as people come and go.

Although some of the 500 people who live within the 2-block neighbourhood defined by LAEV as being part of the ecovillage area are only peripherally aware of this fact, many do participate in some activities, and a lot of effort is put into involving the wider neighbours wherever possible. An organic vegetable coop and regular pot-luck dinners draw participation from the wider community, as do the regular talks and workshops on permaculture and ecovillage issues. Street fruit trees have signs explaining what they are and how to care for them. The small street has recently been further narrowed with widened berms for the trees, and the pavement is made of permeable concrete, all visible signs that here is something a little different. LA Ecovillagers have been instrumental in the conversion of a local street into a small urban park, with stormwater treatment "bio-swales".

Several initiatives have started at LAEV and expanded into successful ventures. One is the Bicycle Kitchen, a bicycle repair cooperative that started in the kitchen of one of the units and has now found much expanded premises nearby as a successful business, building and supporting a culture of bike riding within Los Angeles. Bicycles have become the standard mode of transport for most residents at LAEV, with no carparking rights given to members of

the intentional community. The wonderful gate to the back courtyard made of bike frames celebrates this central part of ecovillage culture.



Los Angeles Ecovillage is a vibrant and inspiring example of what can be done to regenerate an existing neighbourhood. Key attributes:

- Long term vision of building community, living more sustainably, and education by example.
- The originators worked within the existing situation, slowly making contact with neighbouring residents and building connections between them.
- Existing buildings were purchased largely through loans from ethical investors and supporters, and financed by rents. Renovations have happened slowly as funds and energy has allowed.
- Public demonstration of sustainable community development, sharing the processes, strategies and techniques through tours, talks, workshops, conferences, public advocacy and the media.

Websites: <u>www.laecovillage.org</u> <u>www.Gaiauniversity.org</u> <u>www.bicyclekitchen.com</u> Ecological Revolving Loan Fund (ELF) – see laecovillage.org

Cordale Housing Association, Renton, Scotland

Renton is an outlying town 40 minutes by train west of central Glasgow. Established 400 years ago, it became a flourishing town built largely around a large bleaching and dying industry, including a famous "turkey red". With the decline of this industry and the closure of the nearby shipbuilding yards on the Clyde in the 1960s, the resulting mass unemployment led to this area becoming one of the most deprived communities in the region.

A number of local socialist activists including Archie Thomson worked hard in the area to address this, and over time built up a thriving community business, winning government contracts to supply social services to the area. However their belief in empowering the local people to become more independent rather than just applying bandaids to the problems eventually put them on the wrong side of the funders, contracts were withdrawn and the whole organisation folded in disarray. Although as socialists they had a philosophical belief that the state should own the assets, they realized that they needed to become more financially independent in order to break away from dependency and the vulnerability of being under the control of the state. Archie and others formed the Cordale Housing Association in 1991 (Cordale is a particularly deprived area of Renton), achieved a 96% vote from the tenants for transfer of the assets, and have been steadily expanding their areas of concern since.

Cordale Housing Association (CHA) was founded on the principle that "we won't build a better standard of housing for people to enjoy their poverty in". In other words, whilst responding to poor quality housing conditions was a fundamental objective, it was acknowledged that sustainable development would not be achieved unless equal priority was given to the longer-term vision of redressing the social, economic and environmental issues that disadvantaged and stigmatised local residents.

Cordale Housing Association has evolved into the catalyst for social change in Renton and its surrounding areas, taking a lead role in a number of initiatives that link housing investment with health/addiction, unemployment, education, the arts, and community capacity building. They are continually building their asset base and therefore expanding the scale of what they can achieve. Government grants available to housing associations pay a proportion of the capital costs of new building. Owning houses and land means the association can also raise loans from the private sector, and rental income provides an ongoing income. Over the last 15 years CHA has built 200 new houses and refurbished 60 apartments in Renton. A 3-story building of 40 Very Sheltered Housing apartments for older residents needing care is nearing completion right in the centre of town, and the next project of 279 houses on a 30 acre former mill site is about to commence construction.



In all of these projects, CHA works with local residents in partnership to regenerate the community. Tenants are encouraged to join management committees and get involved in the association, and youth engagement is a priority. When they started to take over housing in the area, 93% of tenants were on benefits. Today the proportion is closer to 50%, with lower rent arrears, more pride in upkeep of the apartments and gardens, and more local employment opportunities.

The houses are well-built and of equal quality with private houses in the area, and all tenants of the CHA are given gardening tools and expected to maintain their yards to an acceptable standard. Archie delights in walking guests down a street in Renton lined on both sides with attractive brick houses and asking his guests to name which side are privately owned houses and which side belongs to the CHA. Needless to say the CHA side is the better cared for.

Another important initiative in Renton closely associated with the housing association is the Carman Centre, which is a separate legal entity. The Carman Centre works alongside the housing association to address the social issues and deliver services to the community. It took over a building near the centre of town in the late 1990s, employs 17 staff in the cafe, social support area and doing manual work, and now generates £ 500,000 p.a. in revenue.

More recently a Development Trust has been established to work on the more strategic level, and together these 3 organizations put together a local community strategic plan, formulating a vision for Renton into the future and developing priorities for action. Their vision is to bring about a thriving local economy, a vibrant village centre, a good mix of quality housing for all, a first class local environment, and high quality education, training and employment opportunities.

They are currently undertaking a social and economic audit to determine if and when the area managed by the CHA became a contributor to the public purse rather than a net user of public funds, taking into account employment levels, taxes, educational attainment levels, benefits and pensions paid, health outcomes etc. Archie firmly believes they have reached this point already, and has plenty of ideas for taking it further.

I was hugely impressed by this project and the work that has been done to date, and in no doubt that their vision will continue to come into being. Conditions are obviously different to NZ in terms of the financial support available from the government and the transfer of assets from the local authority, but Cordale Housing Association has gone much further than just becoming an alternative landlord, and has used those opportunities to broaden its sphere of influence into being a wide ranging community-owned and run organisation working for the regeneration of a flourishing local community.

www.cordalehousing.org.uk

Linthouse Urban Village, Glasgow

Linthouse is an area within the Glasgow suburb of Govan, right in the middle of the once thriving shipbuilding industry on the Clyde River. Govan became another casualty of the closure of shipyards, and more recently many migrants and asylum-seekers have moved into the area. The tough and rundown nature of the area was obvious as I walked from the underground station past boarded-up shops and the massive walls of the old shipyards, and many of the 4 and 5-story apartment buildings have an air of neglect.

5 years ago the Linthouse Housing Association (LHA), a major landowner of apartments in the area for 30 years, initiated a project pairing artists with shop owners to work together to redesign the shopfronts. The LHA secured funding to pay for the artists and some of the costs of repainting or otherwise transforming the shopfronts, and 10 businesses participated in this project over 3 years; the LUV website has a series of before and after photos showing wonderful transformations of previously dull shopfronts. This project was the catalyst for establishing the Linthouse Urban Village (LUV), to initiate a range of projects aimed at regenerating the area, attracting more businesses and making the area more desirable to residents.



Community consultation identified a number of facilities desired by the local people. A cafe was high on the list of some, although many older residents felt it would never work in their area. Two previously rundown and boarded-up shops on adjacent corners owned by the LHA have now become the LUV cafe and the LUV community centre, helping to create the beginnings of a living town centre. The cafe has been very successful and provides a hub for local residents. The community centre hosts regular youth drop-in nights, craft classes, a Christmas market, and organises other community projects such as a recipe book featuring recipes and artwork from many of the migrant groups.



One current project underway is a unique youth housing project called Fab Pad, where young people with histories of homelessness, and often addiction and abuse, are offered the chance to work with an interior designer to get ideas and learn the skills to turn a new flat into their home. They are given a small budget, taught the skills required to carry it out, from repainting to sewing cushions and framing pictures, and encouraged into employment or training. Thus the critical and vulnerable stage of taking on a tenancy is used as an opportunity to work with at-risk youth, who learn skills, gain a greater sense of ownership and pride in their home, and are supported into moving on to employment, training or other opportunities.

These projects have all required funding from a variety of sources. The local residents, some of whom have been resident in the area for generations, are not always supportive of change and sometimes resist the more ambitious projects, but little by little the area is experiencing a revival and is a model of what can be achieved.

www.linthouseurbanvillage.com

Findhorn Community

Findhorn is a sprawling, complex, vibrant and evolving community consisting of 600 - 700 people living on two main sites, the Park and Cluny Hill College (a former grand spa hotel), and surrounding locations. The main location, the Park, is the original caravan park in which the founders Eileen and Peter Caddy and Dorothy Maclean established their spiritual practice in the early 1960s, and learned to work with nature to grow the now famous 40-pound cabbages. Gradually a community of people grew around them, drawn to their deep commitment to listen to the "still small voice within" and build a community of love and light.



Community Structure

Over the years the community organization has evolved through a number of different entities, and this process continues.

The Findhorn Foundation (FF) was established in the 1970s as an educational and environmental charitable trust, with trustees elected from amongst the members. Both the caravan park and Cluny Hill College, all of the community buildings (including the community centre, Universal Hall, sanctuaries and workshops) and most of the houses and former caravans are owned by the Foundation. The primary decision-making body of the Foundation is the Council, made up of members of the Foundation of at least one year who commit to staying informed and attending the 4 meetings per month. Day to day running of the Foundation is delegated to the Management Team, members of the Foundation who have been appointed to specific roles such as leading the Finance or Education teams. The Management Team brings most decisions to the council, which sets the strategic direction of the Foundation.

Until the mid 80s the FF was the primary organization, but Findhorn has attracted many people for a variety of reasons, not all of whom have become involved with the FF. A host of enterprises have grown around and within the community, including the shop, bakery, printing press, art and craft businesses, healing and therapists, accommodation and ecological charities. A new level of organization, the New Findhorn Association (NFA) was established as the umbrella organisation for on-site community individuals and businesses, to be a unifying structure and provide community cohesion. The FF is just one, although the largest, of the member organisations within the NFA.

Findhorn Ecovillage

Since 1981 the Foundation has been involved in the development of the Ecovillage Project as a natural continuation of the community's work with nature. A number of other organisations within the community work in partnership with the Foundation to help create and develop the Findhorn Ecovillage Project. New homes are built under a strict set of criteria to ensure they are "ecological" houses. Four wind generators generate 750 kW, more than is needed at Findhorn and therefore contributing power back to the grid. Their community currency, the Eko, generates low-interest financing for community projects such as the wind energy and low-cost housing initiatives and other non-profit community ventures. In circulation since 2001, the Eko trades at parity with the pound sterling and can be used both within the Findhorn community and at some businesses in the local town, encouraging people to 'buy local',

Wastewater from up to 300 people living in The Park is treated in the "Living Machine", a natural non-chemical biological system housed in a large greenhouse. The sewage travels through a series of tanks in a sequence of anaerobic and then aerobic processes, and eventually through a mini-ecosystem of plants, fish and micro-organisms that mirrors the process of decomposition that occurs in the natural world. The technology not only meets tough sewage outflow standards, but does this without chemicals and is also relatively inexpensive. The resulting water is pure enough to use on gardens, although bureaucratic regulations don't currently allow this.



The importance of these and other factors is demonstrated by Findhorn achieving in a recent study the lowest ecological footprint ever recorded in the industrialised world, half of the UK average.

There are now many houses in or adjacent to the Park which are individually owned by people not necessarily members of the FF, the most famous of these being the barrel houses made of old whiskey barrels. The largest cluster of privately-owned houses is known as The Field of Dreams. A small cluster of 7 houses is being designed using the cohousing model,

and will soon break ground. Another very large development being planned is a 40 house subdivision in the duneland to the north of the community, and probably a further 35 houses just north of that, all of which would be part of the wider Findhorn community, although owned by individuals.



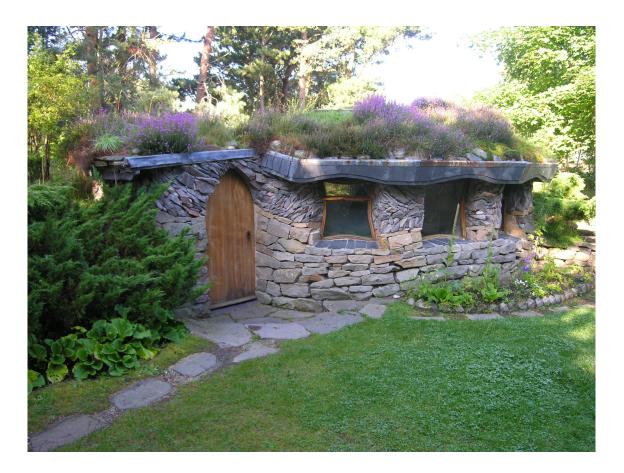
These privately developed housing projects all have their roots in the general Findhorn ethics and values, but are not without controversy and much debate from other members. Being privately owned, these houses may be sold to anyone without any requirement to participate in the FF or even take the basic Experience Week to understand the context of Findhorn. One of the key debates at the moment is around the use of the community buildings, currently all owned and paid for by the foundation. NFA members would like more access to these facilities, but there needs to be a mechanism where they contribute financially to their running and upkeep. There is a move to transfer some of the foundation assets and initiatives, such as the weekly newsletter, from the foundation to the NFA, to enable wider ownership and contributions.

Another issue being discussed at the moment is the aging population. Most people in the earlier days used to be in their 20s, now the median age is climbing to the 40s and 50s. Some of these members have given years of service to the Findhorn Foundation for very low pay and have no pension plan, so the community is grappling with how they can be supported in their old age. Until now there have only been a handful of elders at any time, but this could become a much higher proportion in the future and will put pressure on the ability of the foundation to care for them.

Of all the communities and "eco-villages" I've visited, Findhorn comes closest to feeling like a village. There are many different entities, enterprises and housing arrangements that all come under the Findhorn umbrella, and while this is not always easy or comfortable, this extraordinary place continues to grow and evolve. While the conceptual boundary of the community is rather loose and fluid, it is held together by a very strong centre based on

attention to the spiritual level, the concept of "work is love in action", and the practise of attuning to self, others and nature in every action. It continues to draw thousands of visitors a year to talks, conferences and performances, or to attend one of the many residential educational programmes offered.

Many thousands of people have spent time here living within the community, for periods of time ranging from one week to many years, to experience a way of life that is more conscious, more intentional, more aware, peaceful and active.



The Findhorn ecovillage is a tangible demonstration of the links between the spiritual, social and economic aspects of life and is a synthesis of the very best of current thinking on sustainable human settlements. Its continuing strength is its very fluidity, constantly re-evaluating and experimenting with different forms of governance and organization. It is a constantly evolving model providing solutions to human and social needs, while at the same time working in partnership with the environment to offer an enhanced quality of life for all.

www.findhorn.org www.ecovillagefindhorn.com

Social Enterprise Fringe Forum 4.9.08

The Social Enterprise World Forum was happening at the Sheraton in Edinburgh while I was there, and I attended 3 events of a parallel (free) fringe forum organised by SENScot, the Social Entrepreneurs Network of Scotland. The first was a presentation and panel discussion on a new Social Enterprise Mark that ethical businesses could use to identify and promote their products or services as socially responsible, similar to other marks such as Fairtrade or BioGrow. This Mark has been developed by RISE, an organisation set up to promote the interests of social enterprise in south-west England.

Social Enterprises are defined as businesses motivated by a social or environmental need rather than profit. Any surplus or profit made is reinvested in the social objective of the business, resulting in benefits for the community or environment rather than increased profits for shareholders or owners. The Social Enterprise Mark has been developed to show customers that businesses holding the Mark are founded on these principles of social enterprise.

Social enterprises operating in South West England can apply to use the Mark, and are assessed on a range of criteria before being awarded use. Applicants need to demonstrate that their profits are used or redistributed for social purposes, have clearly stated social objectives, and have externally verified evidence of the social benefits and impacts of their work. They must also generate at least 50% of their income (turnover, not profit) from trading rather than grants in order to qualify. One of the high profile businesses already using the Mark is the Eden Project, described later, the venue for the launch of the Mark in November 2007. They estimate there are currently 55,000 social enterprises in the UK who would qualify to use the Mark.

There is an obvious balance to be kept between maintaining the integrity of the Mark by regular monitoring and updating of business procedures, and not making compliance so onerous or expensive that it becomes just another burden for non-profit enterprises. Other issues raised in the lively discussion were around the arbitrary 50% income cutoff point, which can easily be thrown by one-off grants, and the interaction of this Mark with others such as environmental and fair trade marks when a particular business might require several.

The next session was a "cultural cafe", and I joined the "Community Regeneration" table hosted by Wendy Reid of the Development Trusts Association Scotland DTAS. Wendy reiterated the benefits of owning assets in order to become more autonomous. My question to this table was how a community organisation could acquire those assets in the first place. Many of the answers really only applied to the UK, with such things as land reform legislation, and public bodies that can be convinced to hand over assets to community groups (often abandoned properties that require an enormous amount of work to rehabilitate). They mentioned that there is £40 million of unclaimed money sitting in banks in the UK, that the government is currently considering using as grants to community organisations. Some developers build in community facilities to avoid paying levies to the council, and put in management structures from the community. Another source is from wind companies who erect wind farms in an area and are often required to pay a community benefit to offset the impacts. Other communities have put up their own wind turbines from lottery money, and spend the ongoing income on community projects.

www.senscot.net www.socialenterprisemark.co.uk

The Melting Pot, Edinburgh

While The Social Enterprise Fringe Forum raised some useful issues about community regeneration and how to verify and brand socially responsible businesses, the most interesting aspect for me was actually the venue which hosted this meeting, called The Melting Pot.

A social enterprise providing work and meeting spaces for social innovators, the Melting Pot is an "eco-funky" light and airy top floor of an inner city Edinburgh building which houses, as well as the meeting space we used, a large open-plan office with desks, sofas, and kitchen. Individuals or small enterprises can use these premises on a drop-in or permanent basis and pay an hourly, daily or monthly rental. A range of grass roots organisations, global NGOs, entrepreneurs and freelancers use this space, benefiting from the professional equipment, service support, flexible spaces and cross-fertilisation of working alongside other people involved in social change. It is a very pleasant and impressive facility.



www.TheMeltingPotEdinburgh.org.uk

HTA Architects and Hanham Hall

I was invited to give a talk about Earthsong on 9 September to HTA, a large multi-disciplinary design firm in Camden Town, London. HTA specialises in collaborative design of housing and regeneration projects, working on projects ranging in scale from masterplans of whole city regions, central urban areas and neighbourhoods, to apartment blocks and housing schemes. About 30 architects, urban designers, landscape designers, engineers and sustainability consultants gathered in the central meeting area of the HTA office to listen, and the questions and interaction showed a high level of interest in our story.

They are currently designing a 188 house "ecovillage" near Bristol called Hanham Hall, after they won a competition run by the British government to design this pilot project of a zero carbon community. Hanham Hall is a 6.6 hectare former hospital site near Bristol, incorporating a historic building. As well as the houses, of which around 50% will be affordable, it is anticipated that the site will support retail and employment spaces. The onsite biomass CHP (combined heat and power) plant will deliver energy to all homes. Other features include rainwater harvesting, sustainable drainage, a community centre, allotments, farmers' shops, a car club and bicycle storage. As well as cutting edge zero-carbon building methods and services (the aim is to enable a family occupying one of these homes to reduce their entire carbon footprint by 60 per cent), they are building a community management structure and a development trust into this mix of affordable rent and private sale homes. They were particularly interested in the organizational structure of Earthsong and ways of enrolling people into taking ownership of their community. They were also encouraged by hearing how beneficial it has been at Earthsong to keep the cars away from houses, and may replicate this for some clusters of houses at Hanham Hall.

While the details are still being worked out, it is very encouraging to see a comprehensive mixed-use development addressing both environmental and social sustainability issues from the beginning.

HTA themselves are rather unusual in that they have a working kitchen in the middle of their open plan office, cooking lunch for all their employees every day. The central area is filled with tables and chairs, used during work hours for meetings of project teams, and at lunchtime for eating and socialising. This is definitely a win-win idea, with the designers feeling valued and nourished, and inevitably spending some time discussing projects with their colleagues over lunch.



www.hta.co.uk, www.hta.co.uk/projects HanhamHall.html

Transition Town Totnes

Totnes is a lovely little town in Devon of 8000 people, with the central area still following the pattern of the old walled town. Most of the buildings date from Elizabethan times when the town was most prosperous and the main street is literally only 4 metres wide in some places between buildings! This section of road is appropriately called The Narrows, where the footpath just disappears in places, leaving pedestrians to fight it out with the cars.



Totnes has attracted many 'alternative' people since the 1970s, and this can be seen in the range of wholefood cafes, natural healing centres, organic clothing and craft shops along the main street. A fertile context, then, to grow and nurture the transition towns concept, as a way for people to address the challenges of climate change and peak oil in their local communities. The Transition Town (TT) model began here in 2006 and has spread rapidly around the UK and the world, Including New Zealand. I attended a two-day Transition Town training with Naresh Giangrande and Sophy Banks, and it was well worth while.

The Transition Town concept is based on citizens taking action in their own communities to become aware of environmental issues and build skills and linkages with each other, leading to a way of life that is more resilient, more fulfilling and more equitable, and that has dramatically lower levels of carbon emissions.

Transition Town Totnes has initiated many projects to rebuild community and move the town towards sustainability. Key initiatives include a community currency called the Totnes pound, a gardenshare scheme matching unused garden space with garden-less growers, planting nut trees around town and training tree guardians, a business resource exchange where one company's waste/spare resources is used as input to another, oil vulnerability audits to help businesses quantify their exposure to rising oil prices and assess risk, and a practical training

programme to re-establish many of the skills our generation has lost, such as preserving food and making and using hand-tools.

The training weekend was designed to support, train and provide a toolkit for people setting up transition initiatives in their own localities, and it was extremely useful and thought provoking; a good balance of information and participation, with processes for getting people engaged, group dynamics, information about climate change, peak oil and possible futures, and attention to the deeper questions of the psychological processes of denial, addiction and change.

One aspect I'm particularly interested in is what gets people motivated and what helps groups work together successfully. There are many models of the progression of group dynamics, but they generally acknowledge that as people get to know each other there is a period of upheaval, conflict or 'storming', a totally necessary part of the group process when the group members find out where their differences are and get clear about the identity of the group, what it is and isn't about, and whether they can handle conflict. A group that has a clear sense of who they are feels safe to stretch the boundaries, whereas groups that feel unsafe will hold more rigidly to the culture. Since we are in a time of culture-change, when we need to be finding different and better ways of co-existing on this planet and thinking really creatively to address the scale of problems we are facing, this feels like an important area to keep an eye on.

There was also a clear message to pay attention to process, nurture the initiators, and build a smallish cohesive group as a solid centre before launching into the wider community. This advice was very congruent with my experience of planning Earthsong in the early days, and it was a good reminder for our local TT group in Ranui.

The most powerful part of the weekend for me was an exercise devised by Joanna Macy called 'Meet the Descendants', where we sat facing one other and had the chance to tell our "descendants" from 200 years hence what it was like to be living now in the "time of the great turning" when global devastation threatened and we had to relearn how to live with less oil; what inspired us to keep going and what was our part in that time. I found it extremely moving, to really believe that the human race could/had survived, and that how I lived my life had a part to play in that. Sitting there looking into the eyes of someone from the future, I felt deeply accountable to those future inhabitants of our planet to do my utmost to give them the best possible chance.

It was a full and valuable weekend, and after arriving back in New Zealand, I co-organised a 4-day training with the two Totnes trainers Sophy and Naresh at Earthsong in late January, which was a great boost to the transition town movement in NZ. I believe the Transition Town model holds a powerful way forward to engage people from all backgrounds, honouring and valuing the skills and perspectives they all bring and weaving them together into a more vibrant and connected community. Local holds the key, the antidote to the globalisation that has caused such disconnection from the consequences of capitalism and unchecked growth.

http://www.transitiontowns.org http://www.totnes.transitionnetwork.org/

The Lost Gardens of Heligan

From Totnes I travelled west into Cornwall to stay at another old town, St Austell, specifically to visit two amazing and important projects. The first is a huge garden and grounds developed over 400 years as both a productive and pleasure garden for its wealthy owners and their retinue of workers. It was abandoned in the early days of the First World War when all the gardeners enlisted, and none came back. For 70 years it lay in neglect and ruin, overgrown with brambles and undergrowth, until it was "rediscovered" in 1990 and restored into a magnificent and fascinating re-creation of its Victorian heyday.

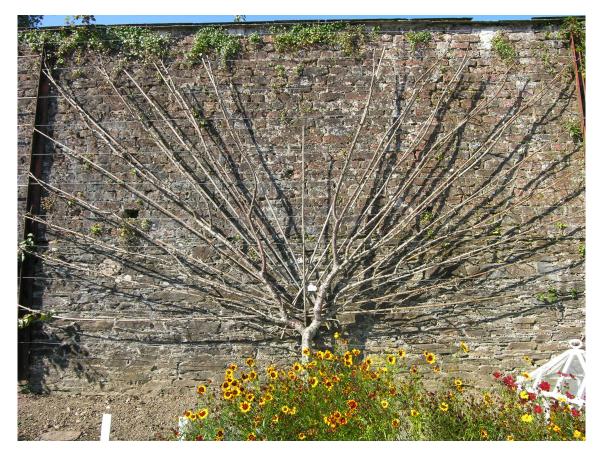
Known as the Lost Gardens of Heligan, it is possibly best known for the gently eroding (and recent) "mud maid" lying sleeping in the woodland. There are a great many beautiful areas of garden, including pleasure gardens with Italian, New Zealand, and Himalayan themes, full of the then rare and unusual plant species brought back by the rapacious Victorian explorer/collectors.

But the areas that most interested me were the productive gardens, which supplied food in the 19th Century for several hundred people associated with the great house and estate, without the benefit of machinery, electricity, or even running water. These have been retrieved from total wilderness and re-created, as far as practical, as working Victorian productive gardens using hand tools and similar cropping regimes as were used then, and growing over 200 mostly heritage varieties of fruit, vegetables and flowers.



The huge vegetable garden works on a 6-plot rotational system that sees root crops, brassicas, legumes, etc, moved to a different plot each year to keep the soil fertile and discourage diseases and pests. They do not water the gardens at all, except for when seedlings are first transplanted - the Victorians did not because they had no piped water on

this property. A system of double-digging and intensive manuring as part of the 6 year cycle provides conditions that encourage deeply rooted plants, allowing them to survive periods of drought.



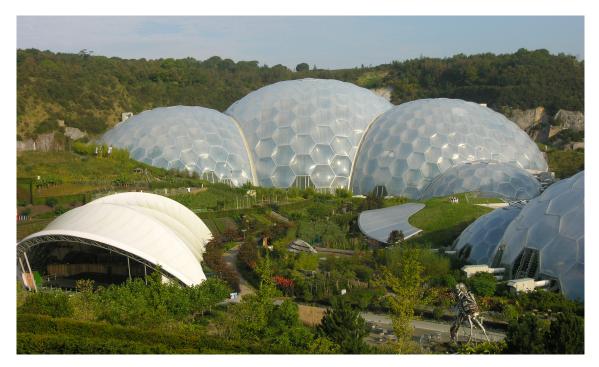
The Victorians went to great lengths to provide suitable conditions for the exotic new fruit they were acquiring from warmer climates, and I was fascinated to see the clever methods they used; espaliered fruit trees against south-facing (sunny-side) brick walls that soak up the heat; lean-to glasshouses with a brick south wall again to soak up the heat; manure-pits either side of low pineapple glasshouses to provide heat to the pineapples as it decomposed.

Heligan is based on a philosophy of "looking backwards and forwards at the same time", and "combining the best of the old with the best of the new". I believe it is hugely valuable in researching and keeping alive not only the old varieties of plants but also old wisdom and methods of gardening that don't rely on machinery and oil. It is also a very beautiful and cherished place.

www.heligan.com

The Eden Project

A second project grew out of the Lost Gardens of Heligan when the founder, Tim Smit, conceived of building a glasshouse to grow and show a range of the plants that have been useful to humans, from spices, rice, tea and coffee, to rubber, cotton and hemp. This idea grew and grew to eventually become the Eden Project, now built several miles away from Heligan in a huge old china clay quarry. This amazing project was largely funded with UK government money as a Millenium Project, with smaller but still substantial grants from the European Union and other funders.



The Eden Project is extraordinary. Two huge greenhouses or "biomes" nestle into the sides of this deep pit, once a devastated wasteland and now filled with graceful paths and beautiful gardens. Three major climate types are displayed: tropical rainforest and dry temperate "Mediterranean" in the 2 biomes, and cooler temperate in the outside areas. It is dramatic, informative, fascinating, beautiful, and full of interpretive sculptures and artworks. I was the first visitor in at 9 am and the last to leave at 6 pm, and I could have spent a week there. There is a Malaysian hut and jungle garden, complete with washing on the line; a huge "WEE man" sculpture (bottom right in the photo above) made up of the 3.3 tonnes of <u>w</u>aste <u>e</u>lectrical and <u>e</u>lectronic (WEE) equipment that an average person in the UK throws away in their lifetime; sections of garden growing plants used for paper, biofuels, dyes, fabrics, medicines; specimens of the plants that give us tea, coffee, beer, chocolate, chewing gum....

And with all of this comes a deep commitment to asking the questions, in the words of Tim Smit: "What does living within limits mean and what can we learn from the past that has shaped us psychologically to become the most adaptive species of all? What might the future look like, and can we meet the challenges ahead? In short, do we deserve the title *Homo sapiens*?" I was deeply impressed with the Eden Project, not only for the amazing spectacle and educational centre that it is, but for the underlying values of social justice, fair trade, environmental responsibility, and education for sustainability that are intrinsic to every part of its operation.

www.edenproject.com

Springhill Cohousing, Stroud

Staying at Springhill Cohousing felt a little bit like being at home at Earthsong, with the visual similarities and the easy camaraderie of fellow cohousers. I gave a talk after dinner one night about Earthsong, and ripples of recognition met my photos, from the vertical board and batten pitched-roof houses to the swales and pedestrian street. Understanding laughter followed my stories of long meetings, construction challenges and ongoing issues such as the pet policy and cooking rosters!

Springhill started in 2000 when David Michael, a developer and cohousing enthusiast, bought a steep 2 acre site near the centre of Stroud, another very old and quaint English town. People were quickly drawn to the project, including several who had been involved in cohousing groups elsewhere who could see that this one had a good chance of succeeding.

The project had its fair share of construction problems, conflicts and delays, but was completed in 2003, and is still the only new-build cohousing neighbourhood in the UK. 34 houses and apartments are tightly packed along two "streets", one solely pedestrian and the other accessing the carparks. An overland stormwater system or "SUDS" (Sustainable Urban Drainage System) winds through the site along swales, concrete "rills" and a small pond. Some houses have photovoltaic cells generating electricity from the sun, although only a couple of houses have solar hot water systems. Inside, the houses are light and spacious. House buyers were able to work with the architects pre-construction to make changes to their house layout, resulting in many different configurations, but generally believed to have added considerably to construction costs.



While construction costs rose 70% during construction, people who have since sold on have still almost doubled their investment due to the huge increase in house value even in 3 years.

However an agreement was built in from the beginning that any seller must pay 0.5% of the sale price of a house back to the community, a painless contribution on the part of the seller given that most sales occur without the help of a real estate agent, but a significant source of funds for the community to continue to upgrade the common facilities.

Another early agreement that has proved invaluable is the requirement that all residents be part of a cooking team. Cooking is compulsory, eating is voluntary! Careful attention is paid to making sure new or intending residents are fully aware of the cooperative nature of the community, and know they are expected to participate. A comprehensive "Welcome Handbook for New Residents" gives much information on the community and systems and helps to educate people on such things as reducing rubbish, how the photovoltaic panels work, procedures for dispute resolution, and the shift from saying "Somebody should do something about..." to taking personal responsibility for how the neighbourhood runs.



www.springhillcohousing.com

Centre for Alternative Technology (CAT)

CAT is another place, like Findhorn, that I visited 29 years ago and which sowed a seed that has borne fruit in Earthsong. It was high on my list of places I wanted to visit, both to pay homage to the influence it has had on my life and that of many others, and also to see how it has grown and changed, and continues to be a source of inspiration and knowledge of sustainable technology.

Developed in an old slate quarry in the mid 1970s, CAT in 1979 was already well established, with displays of solar water heaters, wind and water generation of electricity, composting systems, eco-building etc, all with fact sheets and other documentation comparing systems and providing do-it-yourself plans. It was a hugely exciting place to visit for a young person wanting to change the world!

Although CAT started out as a group of people trying to build community, that aspect faded quite fast and the focus shifted to experimentation and demonstration of 'alternative' building and technology. Today there are many more buildings, the trees have grown up, and the displays are more established, but the underlying philosophy is still the same. The focus of the displays is still on what individuals can do in their lives, with great interactive exhibits about reducing energy-use in the home, the impacts of the car, the importance of composting and many different ways of doing it, organic gardening and compost toilets and natural house building.



As well as the displays and exhibitions, the educational programmes have developed over the years, and they run many residential and distance-learning courses, including the Graduate School for the Environment offering MSc programmes in architecture and renewable energy. This educational side will expand soon when they complete a large environmental teaching facility called WISE, the Wales Institute for Sustainable Education, which will run courses, events and conferences to people eager to "skill-up" for sustainability. They also have a consultancy service advising on renewable energy, sewage and water systems, and environmental building. It is definitely a technology-led approach, rather than an earth-centred or community-led approach, which missed something for me, but the information and education they provide are still hugely influential and of vital importance to our collective knowledge of how to live within the earth's means.



www.cat.org.uk

Hockerton Housing Project

This small community of 5 houses and small farm near Newark, Nottinghamshire, was initiated by Nick Martin, the builder of the "autonomous house" for well known eco-architects Brenda and Robert Vale (currently of Victoria University Wellington) in a nearby village. He and other members who came together to develop the project worked with the Vales to design these highly energy efficient houses. Approached down a country lane, what you first see are fields, sheep, a couple of wind generators in the distance, and the glimpse of a large pond beyond a grassy hill. Our tour guide Simon led us to the top of this hill, to see that the south side was a huge glass slope, and we were in fact standing on top of his bedroom!



The 5 single story houses are joined end-to-end in one long building, earth-bermed on 3 sides and with a glass conservatory along the entire south face. Life-size model sections of the construction in the nearby office building show the extremely thick concrete in the floors and walls, and the very deep roof structure including 500mm of insulation with the concrete and soil above, keeping the indoor temperature of the houses at an even 21 degrees C. Two wind turbines and an array of photovoltaic cells, combined with houses that use only 10% of the UK average energy use of a conventional house, mean that they are net exporters of electricity to the grid. They are self-sufficient in water and treat all wastewater on site, grow a large proportion of their food on site, and run a small educational and consultancy business based on their experiences.



Hockerton Housing have always had economic sustainability as one of their goals, to be achieved through a combination of low costs and income generation. There is a requirement that all residents spend one day a week on community work, split equally between work in the gardens and farm, for which the reward is fresh food, and work on income generation projects such as the educational tours, workshops, publications and consultancy. Households take turns of one month each to make their house available for visits by the tours.

While the shared income-generation aspects of this project might imply a closer cooperation between community members than in other communities I've visited, I got the impression that in other respects they remain relatively independent of each other and there is not the thriving community life that you find in for instance cohousing communities. This may be partly a factor of the small number of households. Their shared building contains the office and meeting/education room, not shared living space.

The residents of Hockerton are all highly skilled professional people, and their combined skills have resulted in an attractive and admirable project. They produce well-designed information sheets and other publications, and have an ongoing commitment to contribute their learning. They are now in the process, having built their houses and infrastructure and with well-established systems, of reassessing their collective vision about going forward.

www.hockertonhousingproject.org.uk

Sunlight Development Trust, Gillingham, Kent

I met Peter Holbrook in Edinburgh at the Social Enterprises Forum in September, and made the trip to Kent to visit his project as it seemed to have many parallels with Ranui and what could be achieved there. I wasn't disappointed. The Sunlight Development Trust and their new trading company Sunlight Social Enterprises (a community interest company, where profits go back to the community) are an inspiring example of community-led regeneration in a very deprived area of England.



The project started in 2000 when local voluntary agencies won a bid for government funding for 5 years to deliver services to improve health outcomes in the area. From the beginning the focus was on consulting and involving the local community in getting involved and determining what was important to them. While their targets included such things as reducing teenage pregnancy and heart disease, they worked from the community's agenda, focusing first on the immediate needs of the local people and working from there. Local people were encouraged and supported to organize groups that met their needs, such as parent/toddler groups, breastfeeding support, etc, rather than expect someone else to do it. The emphasis remains on local people volunteering, running and using their own centre, a policy of active participation rather than consultation. They recognise the need to constantly re-evaluate how they are working, to avoid setting up another rigid system that keeps the power inequality going. Currently 80% of paid staff started at the trust as volunteers, often from backgrounds of unemployment, drug abuse or other marginalised areas of society.

Sunlight is based in an old Victorian laundry, leased to them by the local council for the peppercorn rental of £1 p.a. The council also covers the costs of water, gas and electricity, and gives a 100% rates rebate, making the building running costs virtually nil. The building has been completely renovated and rebuilt into a bright, attractive and inviting centre housing

various facilities and regular users and with several large and small rooms available for meetings and classes.

The Sunlight Cafe is the heart, drawing people in and providing a place to meet. Other social enterprises operating out of this building include a recording studio and community radio station, and some areas are rented out to related organisations such as a doctors' practise and parenting support service. A wide variety of groups such as a Chinese Elderly fitness group, "Suck it and See" (breastfeeding support group), self-advocacy for adults with learning disabilities, and "Aloof Yoof" use the meeting rooms. An area of wasteland out the back has been transformed into a vegetable garden and tranquil lawn area by a couple of local grandparents, providing further opportunities for training, and another community place in this high density housing area.



Along with many other organisations I discovered in the UK, the emphasis has shifted in recent years from relying on government funding to setting up enterprises to generate an income and become more independent of grants. They now run four community cafes in other local health centres, and also the cafe at the local council buildings. Peter consults around the UK, sharing what they've learned at Sunlight and earning consultancy fees for the Social Enterprise. Sunlight Social Enterprises last year posted a small profit, assisted in no small way by the subsidised buildings costs, but an important milestone nonetheless given all the other social outcomes generated by this inclusive and empowering community centre.

www.sunlighttrust.org.uk

BedZED, Wallington, London

BedZED, or Beddington Zero Energy Development, is a 99 home housing development in South London, and is known as the UK's leading example of urban sustainability. As well as the environmentally sustainable design features, BedZED incorporates transport planning, office space and a sports field to address social and economic issues.

Completed in 2002, BedZED was a joint venture between Bill Dunster, an eco-architect who wanted to trial zero carbon design, and BioRegional Development Group, an organisation set up to promote sustainable technology and living of all kinds. A third organisation, a Housing Association called the Peabody Trust, came on board later in the role of developer and social housing provider.

One third of the homes are private affordable housing on a 999 year lease, one third are in shared ownership for key workers such as teachers, police, nurses etc, and one third are rented as social housing. The high-density neighbourhood fits 99 homes onto only 1 Hectare, with 3 story blocks containing 1 to 4 bedroom homes. Cars are kept to the edges of the site and narrow alleys link the buildings. All homes have small ground or roof garden areas.

Construction materials and methods were chosen to be as replicable as possible, although the very thick highly insulated walls and green roof are not standard construction. Walls are built of high density concrete, with oak weatherboards and recycled steel beams, and with sedum (a form of succulent) roofs. South triple- and quadruple-glazed windows bring in the sun to heat the mass walls. The most striking features are the colourful ventilation cowls on the roofs. When houses are designed as these are to be relatively airtight, with large thermal mass, good solar gain and high levels of insulation, adequate ventilation does become an issue even in the London climate!



Rainwater from roofs is collected and used for flushing the WCs. Permeable paving and sedum roofs reduce any water runoff from the site. Photovoltaic panels on the south-facing roofs generate 20% of the electricity used on site. An experimental CHP (Combined Heat and Power) plant, though 85% efficient at converting waste urban street tree wood into heat and power, is no longer used, and the Living Machine for treating waste likewise lies inert. Both units have required ongoing management and maintenance that was found not to be cost effective for 99 houses, but would work better for a scale of 500 houses or more.

While the design of the houses and services results in a significant reduction in the environmental footprint, the habits of most residents of BedZED are little different to the UK average. The original residents were given training in the most effective use of their house, but as new residents move in they only given a manual and often don't use the systems to best advantage. Surveys have shown that behaviour plays as significant a part in environmental footprint as the buildings. If residents altered their behaviour, their footprint could drop below the sustainable global average footprint, but currently BedZED only achieves a partial reduction, even with state-of-the-art sustainable buildings and services,.

Community interaction between residents is higher than in average UK houses, but the full potential of cooperation remains to be realised. The community centre and meeting place is tucked out the back next to the (little used) sports field, and is consequently also little used. There is a small, bare neighbourhood square, a regular community cafe and farmers market, but for many residents it is just a place to live, albeit more comfortable and efficient than most.

A transport plan built in from the start encourages more sustainable transport choices. There is plenty of bike storage on site. There are fewer carparks than houses, and while those for standard cars have a weekly charge, electric cars park for free and use the charging points on site powered by the photovoltaic cells on most south-facing roofs. A car club operates from the site providing cars for hourly rental; this is considered a good transition from private car use to public transport, and each car club car displaces 5 or 6 private cars. Overall the average resident of BedZED drives 60% less than the London average.

BedZED is an impressive experiment in providing high-density housing that uses and encourages use of significantly fewer resources than standard housing. BioRegional occupies an office at BedZED, managing and monitoring the learnings, offering tours, training, information and education on related issues, and is involved in further projects that take these ideas into other contexts.



http://www.bioregional.com/programme projects/ecohous prog/bedzed/bedzed hpg.htm

Sieben Linden, Poppau, Germany

Situated in the Altmark region of former East Germany, Sieben Linden has a far-reaching vision and philosophy of community living, trialling of low energy building systems and educating for sustainability. The pioneering group first came together in 1991, and in 1993 established a project centre from which they did preparation work and research into systems and land. They approached several local authorities, and unlike most of the others, the council of the small village of Poppau was enthusiastic about their establishing an ecovillage in that area. In 1997 they purchased an old farm 1 km from the town, and proceeded to bring their vision into being. The buildings are now spread over 6 hectares, with 11 Ha of gardens and farmland and 25 Ha of forest.

The community now consists of 85 adults and 35 children, with various long and short term volunteers, and their goal is to grow to 300 people. Several large buildings have been completed including a large community building with kitchen, dining, meeting and short term sleeping quarters, a renovated former farm building which houses various businesses, a shop, disco, and more sleeping quarters, and several large multi-person residences.



The community is made up of several "neighbourhoods", the idea being that each would have a strong sense of identity and form their own character and philosophy. In practise only some have developed in this way. The most radical is "Club 99", where until recently all houses were built and inhabited without machinery or power, gardening was done with horses instead of tractors, and all food consumed was vegan and raw. This stance has since softened a little and residents now use power for some tools and computers, but their philosophy is still to experiment and see how far they can go to provide for themselves without the use of machinery.

Most neighbourhoods have built at least one permanent building to house individuals and families. Facilities vary from fully self-contained units with separate facilities for family groups, to separate bedrooms with shared kitchen and bathroom. Many residents still live in caravans with little external privacy and little insulation, but interestingly sometimes these are seen as more desirable due to greater separation from others.

Construction of new buildings is ongoing, with two large multi-residence houses under way at the moment. These are largely built by residents, and volunteers who spend anything from one week to a full year working on the construction in exchange for food and board. The preferred construction method at Sieben Linden is strawbale construction, and they are constantly trialling new methods, learning from one building project to the next, and testing and documenting their findings thoroughly in order to promote this sustainable way of building.

As an experiment in living well with each other as well as with nature, the residents of Sieben Linden have a strong commitment to social processes that foster trust and understanding. A full group meeting every 6 weeks for half a day allows time for community building processes, information and decision-making on a wide range of issues. Day-to-day decision-making is about to be devolved to a new structure of councils that pay attention to the ongoing vision and economics, as well as others that address building, membership, food, education and infrastructure issues.

The next project being planned is a large seminar building and more guest accommodation surrounding a central courtyard, in order to increase the educational outreach and workshop programme. One problem that Sieben Linden shares with other rural communities is the difficulty in creating incomes. There are many skilled people living there, but the population is not large enough to support many jobs. While there is a huge range of skills that they could share and that the world needs, from eco-building to permaculture to non-violent communication and consensus decision-making, their distance from population centres makes this difficult, and providing facilities will allow them to increase these programmes.

My 3 days at Sieben Linden were a haven of peace and tranquillity. They are far from any major roads and the lack of traffic or most other machinery noise was heaven. Bicycles of all shapes and sizes are the preferred mode of transport, some reclining, others upright or folding, some towing trailers, others with large children-carriers in front.

In their own words, Sieben Linden Ecovillage aims to provide a model for a future way of life, in which work, leisure, economy, urban and rural culture can find a balance, to show how humans can live more responsibly with nature. "Because it's not so important what we're up against, but more that we act on our principles!"

http://www.siebenlinden.de/english0000.html

Dyssekilde EcoVillage, Torup, Denmark.

Dyssekilde is an attractive community of idiosyncratic houses in central Denmark, which has had a long and arduous journey from conception to realisation. The original proposal in the mid 1980s was for 100 houses built in clusters of 10 - 15, each cluster having a common house, and with a large central common house for the whole community. However due to various setbacks and lack of numbers in the development stage, houses have been built over time rather than all at once as envisaged, resulting in less cohesion and some clusters being more spread out than expected. An area was set aside for a common house in each cluster, but these have not been built.

The community now consists of 50 houses in 6 clusters, on 8 hectares of land with another 5 Ha of gardens. Each cluster has its own meetings to decide such things as the planting plan for that area, and some clusters are more cohesive than others. They have a full meeting of all residents every 3 months. For many years they used the old farmhouse building as their main common house, but eventually sold it to a school they developed, retaining one gathering room for use of the community as well as the whole nearby village. A large new common house was completed only one year ago, with dining/meeting room, kitchen, laundry, guest rooms, children's room and office, (almost exactly the same facilities as the Earthsong common house), but this was so long in coming that it is not yet fully integrated into residents' lives, and it has the feel of an underutilised resource. Common dinners are held only once a week.

While there is still room for three more houses, the community are planning a series of vision meetings to get a direction for the future. They may decide to keep the house plots as open space, being directly to the south of the common house. Another idea is to build a health centre, with sauna and rooms for health therapists.

Dyssekilde has won many awards for their ecological housing. They treat all wastewater on site, have a wind generator and extensive vegetable gardens. A small shop and cafe at the site entrance sell products made within the site, and many small businesses run from homes. They have plenty of land to increase their production, and though the establishment has been gradual, it feels like it will continue to develop over time.



http://dyssekilde.dk/

Svanholm, Denmark

Svanholm is well known throughout Denmark, being major producers of organic vegetables and milk products. I wasn't able to set up a formal visit due to time constraints, so just stopped in for a quick walk around when passing.

The community consists of 85 adults and 35 children, living and working an old farm with extensive old buildings, sheds and other facilities. Established 30 years ago, they have done major renovations of the old buildings to accommodate all families and most others in self-contained apartments, with some shared facilities for single people.

Svanholm has a shared economy, with residents originally pooling all their incomes and drawing only pocket money. They started with a system where people worked in specific work teams for only 6 months before moving to something else to generate equality and avoid specialisation, but this proved too inefficient for the complex demands of running a large farm and no longer applies. People now pay only 80% of their income into the collective pool. Some residents work on the farm or in jobs such as cooking for the community, while others run small businesses such as making furniture, children's play equipment or kitset eco-houses, or work in the local town. They eat together 6 nights a week.

Some residents have moved into the neighbouring town for more space, while remaining very involved in the daily life of the community. This was a pattern I saw in several other communities such as Findhorn and Sieben Linden, where people are committed to the community but need a little more space from the pressures of community living.

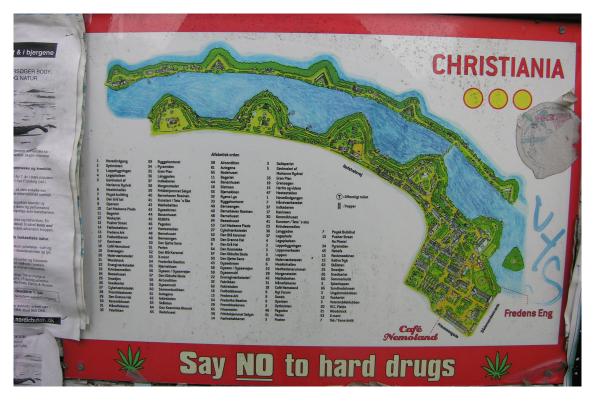
A year ago a fire gutted the milking shed. A larger milking shed is now being planned for a different site, and they are taking the opportunity to renovate a barn to house a range of health practitioners, and to open out the existing shop to the south and build a cafe and market place for the many visitors they host every year.



http://svanholm.dk/en.php

Christiania, Copenhagen, Denmark

Christiana is not an intentional community in the usual sense of the word. It is a large, anarchic "village" near central Copenhagen, a haven for old and young alternative lifestylers, a Freetown full of people, bicycles, large brick industrial-scale buildings, stalls and businesses, graffiti, and hand-built houses. Up to a thousand people live there in the main area and spread along the banks of the lake and canal. Visitors are welcome to wander through the house clusters and along the wooded walks (it's publicly-owned land after all); people have been living here for over 35 years and there is a vibrant life to the place.



The site was an abandoned army barracks and weapons store when it was taken over in 1971 by locals, squatters, and alternative lifestylers wanting to build a life based on communal living and freedom. Over the years there have been many attempts by the authorities to remove them, but each time the Christianites have rallied enough support through street theatre, media and political actions to stave off the need to move. After the first few years Christiania evolved into an organisation paying rates, power and water like any other residents in the city, and even secured money to help them to restore some of the old military buildings. Art, music and theatre have flourished, along with other innovative enterprises such as the women's blacksmithy, vegetarian restaurant, and the bicycle business that designs, manufactures and exports bicycles around Europe.

Christiania has always been open to all comers; to paraphrase their own words they are a "loser's paradise for homeless and jobless young people, single mothers, Greenlanders, street people and vagabonds", as well as the politically active and freedom-loving. This does mean a wide diversity of people and the need to manage the problems associated with marginalised people, in particular an ongoing issue with drugs. Although all hard drugs are banned, the community is widely known as a source of hash, and the main street, Pusher Street, is lined with ramshackle booths where dealers sell their product. I was there on a cold, wet autumn day, and the atmosphere was a little menacing, certainly uncomfortable, to walk past these clusters of men hanging out smoking or warming their hands at the fires smoking in oil drums, eying up any strangers to assess if they were either potential clients or undercover police.

Once beyond Pusher Street, Christiania lightens up with shops and businesses in the old barracks buildings, a large warehouse selling recycled building materials, a vegetarian restaurant and cafes, and quirky houses. They have their own rubbish truck and recycling centre, but don't grow their own food in any significant quantities; have some communal composting toilets, but heat their houses with oil, gas and wood stoves.



I stayed with a long time resident and artist, and she said that the community is currently at another cross roads. Many residents want to accept a government offer to build more houses, provide more services, and give more security of tenure, but others, mainly the pushers and others involved in the drug trade, have no desire for things to change and block any moves to accept the offer. With a conservative government again in power, residents are nervous that attempts will again be made to close them down. Many residents have a big vision to expand their creative and educational enterprises in the future, but it is very difficult to get agreement on any major undertaking with such diverse interests, and it seems likely that any real innovation will continue to be at the level of individual initiatives rather than collective projects.

http://christiania.org/

Aegidienhof, Lubeck, Gemany

Aegidienhof is a city block of buildings dating back to 1270 AD that originally housed a convent, factory, church, and other buildings that served many uses over the years. In 1998 the whole block became available and the project management and business consultant firm ConPlan bought it for redeveloping as mixed housing and businesses.

ConPlan did the initial feasibility and design work, advertised for future residents and held information evenings. People bought into the project off the plans, and ConPlan then facilitated regular meetings of the group of future residents to make decisions by 75% majority about how the project evolved. ConPlan continued in the role of developer/project managers, and sometimes had to make decisions themselves, but always sought agreement from the group later. Buyers worked with the architects to customise their own units (paying an hourly rate after the first few hours).

The graceful old brick buildings now house 52 apartments, 11 businesses and a cafe, inhabited by people of different ages, incomes and physical abilities. All the buildings have been refurbished in a resource and energy efficient way, with high levels of insulation, a combined heat and power plant delivering hot water to all buildings, rainwater collection, permeable paving and a car-free environment.



Like most of the other neighbourhoods I visited in Germany, Aegidienhof is not cohousing as we understand it, and has no common house or other shared facilities except the courtyard. However, with the initial input of buyers in the design process and an ongoing legal structure that ensures communal decision-making of the group in management of the shared courtyard, there is a much closer relationship of owners with each other than is normal for city apartments. One way in which this is demonstrated is that the residents have set up a Charitable Trust consisting of all owners, to promote arts, cultural and educational events for youth and elders of the wider community.

http://aegidienhof-luebeck.de/ http://conplan-gmbh.de/

Okologische Siedlung Kiel-Tries



This community felt very familiar to walk into. It has the recognisable feel of a cohousing community, with cars at the edge, buildings relating to shared open pedestrian space, and the pleasing combination of individual expression within a cohesive whole. Originally part of a farm with existing old farmyard buildings, the property was bought in 2003 by a couple who had been part of two other projects and had gained confidence and skills from these experiences. They advertised for others who paid a fee to join and become part of decision-making. They commissioned ConPlan as development consultants and project managers. ConPlan were able to offer financial advice to individuals, and source development funds.

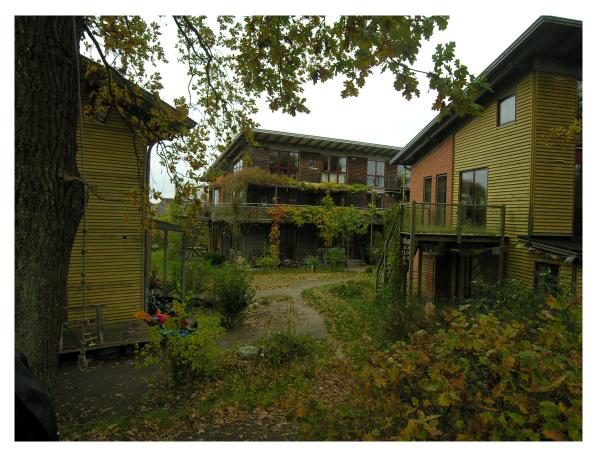
While the overall plan was determined by the group, buyers worked with the architects to customise their own units. The builders and tradespeople were hired directly by the group, with project management handled by two members. Each buyer paid for the cost of their own units, with the price of each being determined by the architects and ConPlan.

The neighbourhood consists of 25 units and 4 businesses, including a doctor's surgery, architects' office, and a shop owned by the community and leased to the shopkeeper. The buildings enclose a shared courtyard with children's playground, a seating area and a small common house. This is not used on a regular basis for common dinners, but is often used for meetings and parties including of people from the wider neighbourhood.

Alte Gartnerei, Kiel, Germany

This is a 16 unit settlement on a former orchard and market garden site, with the unusual neighbour of an enormous television tower. Developed by a group led by Falk Munchbach, who had been involved with Moorwiesengraben, this project took 5 years until construction began in 1999. They used the same architect as in Moorwiesengraben, Heidrun Buhse, and got ConPlan involved in the late planning stages.

20 adults and 20 children inhabit 6 buildings on just over 5000 m2. All buildings and hot water are heated with a common pellet-fired burner. There is a common house but no regular common dinners and not a strong community feeling, although they have an annual review with good attendance, a choir and 2 working days a year. Although the founder wanted a permaculture village, the residents have not agreed on this, and there is no common vision for the ongoing development of the neighbourhood. However there is a very pleasant feel about the place, and as with other developments I visited in Germany, there is more interaction than in a standard housing cluster.



Moorwiesengraben, Kiel, Germany

Designed by one of the founders Heidrun Buhse and completed in the early 1990s, Moorwiesengraben was state-of-the-art eco-building in its day, with compost toilets, grey water reed bed system, common heat and power, high levels of insulation and green roofs. Many of the high ecological standards employed in the buildings are now required for all buildings by the German government, so are no longer noteworthy, surely a matter to be proud of!



21 units are housed in 2 story buildings arranged along paths. Being now 16 years old, it has a well-established feel, with mature trees and paths lined with landscape retaining walls built of large carved stones recycled from old buildings. The common house, as well as housing an anthroposophical kindergarten (although there are no pre-schoolers left in the community), has two community spaces, one only for community use and one which is also rented out to the wider community. There is no kitchen and no common dinners, and community interaction happens spontaneously between individual residents rather than as organised activities.

The common heat and power is fired by gas and was new and experimental at the time. The feeling now is that too much heat is lost by the pipes in the ground. The compost toilets in every house are also considered a problem, requiring ongoing care and maintenance, but the compost is still valued and used to replace the sandy soil lost over time from the green roofs. The grey water reed bed system has just had an overhaul after 16 years of successful water treatment, and should work well for another 16 years.

Although the community included a very high number of children in the early days, these have largely grown and left home, and residents are discussing the implications of becoming an aging community. I found it very interesting to see this cohousing community, not unlike Earthsong in its vision and design, but at a more mature stage of its life cycle. The shift in demographics will be an interesting challenge in the years ahead.

http://www.oekosiedlungen.de/moorwiesensiedlung/steckbrief.htm

Allmende Wulfsdorf, Hamburg, Germany

This is another project which has benefited from the services of ConPlan. The 4.6 Ha site, containing several existing buildings including housing, a gymnasium, and a youth camp, was bought in 2000 by 4 people. They formed a trust, expanded the group, and with grants and cheap loans from the city and the government began renovating the existing housing blocks and building new buildings.

The local council wanted more services in the area, and required that 40% of the buildings be for business premises. Although this project is located in an area where there are several other communities and projects including a Demeter farm and a nature sanctuary, there is no obvious local density of population to support this range of services, and relies on people coming from further afield. However I was assured that bicycle use and public transport mean that not everyone has to use their cars to travel there.



A large new health centre is at the entrance to the site, with rooms for a variety of health practitioners. There is a kindergarten adjacent to the entrance. The group was approached by a local undertaker wishing to build new premises, and after initial reluctance they agreed to include this business. The attractive premises are now available for meetings and other events as well as their core business, and have regular art displays. The old youth camp buildings are being renovated for use by small businesses including finance, lawyers, software, and as an artists' quarter, housing a variety of creative ventures.

There are now 100 units inhabited by 250 people (1/3 of them children), a new youth house is almost finished, and a community building is being planned. I was struck by the lack of external private space, with freestanding 4 & 5 story buildings set apart in park-like grounds. In fact they have a firm rule that forbids fences, even though many ground-level units do have small personalised areas around their units. While the houses are in individual ownership, the ground is owned by all, with residents having the right to go anywhere on the

grounds including on the terraces. My host Julia explained that Germans in general don't have the same need as New Zealanders for external privacy, and there is no direct translation into German of the word "privacy".



Every building has a 5 metre strip around it that is communal land for that building and controlled by agreement of the residents of that building. All other areas are owned by the community, with decision-making by the whole group. There is little formal community life however. A social event held once a month in the gymnasium attracts only 30 - 35 people, although it is used for many sports events and tournaments including by members of the wider community. It is hoped that the young people, who have little else to do in the area and yearn for the big city of Hamburg, will be happier once the straw bale youth house is completed. Many residents question the need and the expense of the planned community house, but without a neutral place to meet it is much harder for that sense of cohesive community to flourish.

In terms of sustainability, the buildings collect rainwater for use in washing machines and toilets. The two new housing blocks are oriented to south for passive solar gain. Insulation levels are higher than standard, assisted by a cheap government loan, and photovoltaic panels are planned for the future. Cars are parked away from houses, and as I saw all over both Germany and Denmark, much use was made of bicycles for transporting both people and goods.

This project was the most extensive I saw in incorporating businesses into a community. Due to the language difficulties I was unable to pursue much in-depth enquiry into how these were funded and how they integrated with the housing. Being somewhat isolated from any local town centre, they relied on people making intentional trips to make use of the services rather than on passing foot traffic. As this is a new and still developing project, it will be interesting to see how successful these businesses are into the future.

Hong Kong Social Forum and Sustainable Development

And so to Hong Kong! What an amazing, buzzing, <u>warm</u> experience (after October in Europe heading for winter), with thronging humanity in all 3-dimensions. I was anticipating taking wonderful photos from the plane of the stunning scenery, but the pollution was so bad that we were almost on the ground before I saw anything other than haze.



My contact Hoi Wai had organized several activities for me the next day, the first being attending one of the events of the Hong Kong Social Forum under way while I was there. Called "Community Documentation", it was a walking tour of the Kwun Tong District of Kowloon, where massive urban renewal is planned for the next few years. It is a rundown but vibrant and diverse area of Hong Kong, developed on reclaimed land in the 1950s and 60s to house factory workers, with a high proportion of unemployed and aged people, a low median income, and 55% of people living in public housing with another 13% in subsidized housing. I followed the group into several existing buildings as they talked with long-time occupants of the district, including a Tao Temple and an owner of racing pigeons. The gist of the conversation as far as I could make out was that people knew that upgrading was needed but could not see where they would fit into the new scheme.

I was then taken to lunch to meet members of the Hong Kong People's Council for Sustainable Development, a high powered group of individuals from backgrounds such as CO2 computer modelling, sewage treatment, rehabilitation of disabled people, Oxfam, the Hong Kong Civic Party, and a director of environmental investments in China for a private investment company. It was good to hear that awareness and initiatives around sustainability were also under way here in this most urban of cities.



My 4 day stopover in Hong Kong happened to also coincide with a public lecture by Prof. Lord Nicholas Stern, formerly Chief Economist of the World Bank and Head of the UK Government Economic Service, and the author of the seminal report for the UK government in 2006 known as the Stern Review. He stressed in his opening comments that the two big issues of the 21st century are world poverty and climate change, and any attempts to address one must address the other, or fail. As an economist, he took it as a given that economic growth is a good thing, but his stance is that low carbon growth, rather than being a brake to the economy, can be a strategy for economic growth.

This lecture was subtitled "The Key Elements of a Global Deal on Climate Change", which he is promoting as a desirable outcome of the 2009 post-Kyoto talks in Copenhagen. He outlined 6 key points that he believed a global deal must cover, in order to address the scale of change required, ensure it didn't damage the world economy, and be equitable between first and third world countries.

- The need to hold greenhouse gases below 500 ppm means cutting global emissions by 50% by 2050. With the expected population increase to 9 billion people in 2050, this means emissions need to be reduced to an average of just over 2 tonnes per person per year, which is what India emits now. Currently the world average is 7 tonnes/person/year, with the US and Canada on 20 tonnes/person/year. For this reason, rich countries need to cut emissions much more substantially than poorer countries, and is why the UK and other European countries are committing to 80% reductions in emissions by 2050.
- 2. The developing world needs to be allowed to plan for low carbon growth.
- 3. Bring in carbon trading and carbon taxation, allow efficient companies to sell their carbon allocations to businesses who need more.
- 4. Cut deforestation by 50%, as deforestation accounts for 20% of emissions, and has huge effects on water flows, land erosion, biodiversity and livelihoods.
- 5. Sensible sharing of technology.
- 6. Assistance by the rich countries to pay for developments in poorer countries for adaptation to climate change. The rich world is responsible for 70% of CO2, therefore needs to pay for the extra costs of the developing world.

In his closing comments on the current global financial crisis he said we did not recognize the risks of the house price rise boom built on top of low equity loans, and the neglected or ignored risks have come back to bite us. Similarly, the longer we ignore the risk of CO2 emissions affecting climate change, the worse it will be. We need a fiscal boost to grow out of the financial crisis, with serious investment in areas of clean technologies.

SHARING MY LEARNING

Throughout my journey I wrote a blog of my travels with detailed descriptions of all the places I visited. This was extremely useful for me in capturing my immediate impressions and learnings before moving on to the next experience, and was accessible on the internet to anyone interested. In particular this blog was followed by colleagues from networks such as Heart Politics, Earthsong Eco-Neighbourhood, and the Social Entrepreneur Fellowship. See www.robinoverseas08.blogspot.com

Knowing that the two Totnes Transition Town trainers Sophy Banks and Naresh Giangrande were planning to be in New Zealand in January 2009, on returning to New Zealand in late October 2008 I initiated and co-organised a four-day Train the Trainers workshop, led by them and held at Earthsong from 23 – 26 January. Eighteen motivated and highly skilled people from around New Zealand attended this training, and from this have established a national network of Transition Town trainers, able to inspire, support and resource local towns and neighbourhoods throughout New Zealand to rebuild resilient communities more prepared for the challenges ahead.

Since returning from my travels I have presented talks and photo shows to my Earthsong neighbours, the Summer 2009 Heart Politics gathering, and to my colleagues at the Social Entrepreneur Fellowship.

Our educational trust the Earthsong Centre Trust is developing a programme of workshops and tours to inform and promote socially and environmentally sustainable design and technologies. As part of this programme I will be presenting a series of three public talks in June 2009 based on my travel experiences, to cover the following topics:

- Respecting the Earth: sustainable buildings, technology, and patterns of habitation.
- Rebuilding Local Community and Engaging Neighbours
- Intentional Eco-Communities the Synergy of Environmental and Social Sustainability.

APPLYING MY LEARNING

The primary motivation for me to undertake this research was to inform the thinking and planning currently underway for the redevelopment of our local area.

Our local town centre of Ranui will undergo almost complete re-development over the next 5 – 10 years. This includes not only the land adjacent to and associated with Earthsong, but the new library being planned by Waitakere City Council, the new multi-disciplinary medical centre about to begin construction, redevelopment of the existing shops, and construction of many new shops and services.

When Earthsong Eco-Neighbourhood bought our site immediately adjacent to the shops and community centre of Ranui, we always intended that the front portion of our site would be developed as eco-friendly businesses which would link the housing with the wider neighbourhood, enhance the adjacent commercial centre, and provide work opportunities for both Earthsong residents and the wider community. Walk-to-Work Eco-Developments Ltd, a subset of Earthsong members, was established to develop this part of the property.

Since late 2005 the key landowners of the commercial centre of Ranui, including Walk to Work, businesses, a local community group and local council, all of whom intend to redevelop their properties in the near future, have been working together as the Ranui Central Development Network (RCDN) to develop a new model of town centre revitalisation

and council consultation, and to create an integrated town centre that supports the unique cultural diversity and spirit of the area. This can be achieved through both encouraging well designed public space and buildings, and involving and empowering the local community.

The Ranui Town Centre redevelopment is an extraordinary opportunity to model how the existing suburban fabric of our cities can be recreated in a more sustainable configuration. As the key representative of Walk to Work on the RCDN, I will continue to contribute ideas and knowledge from my research to enhance the scope of this project as a model of a socially and environmentally sustainable town centre. The redevelopment of central Ranui could demonstrate a range of measures that can be replicated in other New Zealand towns and suburban centres, to reduce environmental footprint and increase awareness of sustainability issues and actions that can be taken.

Local authorities throughout New Zealand would find aspects of my research of value, and I intend to offer the series of three lectures that I am currently developing to local councils such as Waitakere City Council and Auckland City Council. I will also be approaching planning, architecture and environmental science departments of universities with this material. However in the longer term I believe there is greater value in demonstrating these ideas and principles in a living neighbourhood, than just continuing to talk about it, so my main focus is on applying the learning to my own local community and rebuilding a flourishing and vibrant local town centre.

RECOMMENDATIONS

<u>Local authorities:</u> Use Transition Towns as a powerful model for community engagement. Fund a Transition Town coordinator and office in each local authority area, to give a physical base and an approachable face that will encourage local people to drop in and get involved. This centre would work to support local initiatives, connect people and projects, coordinate between and support neighbourhood groups, and set up regional networks.

<u>Community groups:</u> Where possible consider ways of building social enterprise and income generation into social projects, rather than relying completely on external funding. Combine arts with business, environmental repair with reskilling, and other creative collaborations that fulfil all three needs of social, environmental and economic sustainability.

Consider the benefits of, and if possible find ways of obtaining ownership of the buildings and other assets that will allow greater self-determination and local control over future enterprises.

<u>Ranui Town Centre:</u> Use the unique opportunity presented by the RCDN, and other initiatives already present in Ranui such as Project Twin Streams and the Sustainable Homes Project, to redevelop Ranui as a model of sustainable redevelopment of an urban town centre. Position and brand Ranui as a centre for healthy, organic and environmentally aware businesses and services. Set up a shared office space like the Melting Pot to support and nurture fledgling eco-friendly businesses and organisations. Work with the cultural and ethnic diversity of people in Ranui to create a vibrant and alive local centre.

I strongly believe that both physical design and social connectivity are essential elements of learning to live more sustainably on this planet. It is the synergy between these two elements that fascinates me, and I will spend the rest of my life working on ways to encourage these. Our survival depends on the human species becoming an asset to the planet, not a liability, and I am committed to doing what I can to work towards this.