

The illabunda story
(Presentation to the Permaculture Convergence APC9,
Jonathan Cook, March 2008)

1. (Title)

This is the story of the illabunda eco-village, a project that my family has been working on for some years now. **(location)** Illabunda is a 5 acre property at Winston Hills about 25km west of the city of Sydney. It is in the Sydney Basin bio-region, the Cumberland Plain sub-region.

3. (close aerial) This is an aerial view of the place, a patch of green in suburbia. My parents, Rod and Judith have lived there for 54 years.

The Darug people were the original custodians of the land.

Governor Macquarie arrived in 1790's and the land was cleared by convicts. **(Pic of OTH)** This is pic of the area of Toongabbie painted in 1792 and is where we believe Illabunda is today – on the ridge you can see in the painting – called One Tree Hill (because of the one tree, an old Forest Red Gum, left standing by the convicts).

5. (pic of 1955) This is the property in 1955 when my father was building his house, which is still there today although a bit worse for wear. He named the place "Illabunda" meaning "place of swallows" because of the swallows nesting under the eaves of the shed that was on the property at the time

As I was growing up we had vegetable gardens, orchards, chooks, horses and cows. **(JC and CD)** – pic of my sister Clarissa and I feeding two calves before school.

Sometimes an (adult) cow would get out and go rampaging through the neighbourhood – which was all new houses with neat gardens then. It would be my job to go out and find the cow and get a chain round its neck and drag it out of the garden and back home. Pretty embarrassing for a teenager!

7. (1974) This is the property in 1974 - our parents planted a lot of trees and they were well established by this time.

By the late 1990's our parents began to think what they should do with the property – it was too expensive to keep as it was and they were getting too old to look after it.

(vista) They also had a real connection to the land and didn't want to leave but wanted to do something that was "future friendly" **(1992 pic)** They wanted people in the future to enjoy the place as they had with healthy and fresh foods from the garden, places for children to play with billycarts, tree houses and trees to climb.

10. (next door) Then this happened to the next door 5 acres – the land was completely razed so that villa homes could be built on the unstable ground. They wanted to avoid that happening to their place at all costs. They loved their trees and wanted them preserved. **(spotted gum)**

The family tried a lot of development ideas from the late 90's and by 2003 my parents had brought me into the process and had developed a vision **(vision)**

to create a space for use as residential housing in a manner that is socially, environmentally and economically sustainable

and in so doing, to create a successful community project that will be delightful to live in and provide a model for sustainable development in urban Sydney.

The council required a Masterplan because it was considered to be a sensitive site. Shouldn't be too hard I thought. We'll just get an environmental planning consultant to develop a masterplan for an eco-housing estate. We won't have to do too much and it will be all done within a year or so. So they said! A monumental understatement.

13. (Buckleys Rd view) Its now 5 years later and we have a debt of over \$1.0M and spend every spare minute of every day working on the project. Which is not something that I would ever have conceived 5 years ago.

By 2005 we had learnt the hard way that consultants couldn't help us much and that what we wanted to do to was too far out in left field for regular planners and property developers – so we would have to do it ourselves. **(clearing the site)**

At that time we started to learn about eco-villages and also permaculture and Clarissa and I and our architect went to an eco-village conference at Crystal Waters in Queensland **(Crystal Waters)** with Max Lindegger and Lloyd Williams.

At that conference we got a strong sense that an eco-village was what we should be looking at for Illabunda. **(night pic)** We also started networking with other like-minded people and gained the understanding that we needed people on our team who shared the vision rather than just treated Illabunda as another job.

17. (Aldinga) After Crystal waters we had a look at Aldinga in Adelaide and talked to Steve Poole and Lou deLeeuw. We also visited Christie Walk in Adelaide city and talked with Paul Downton about ecological urban design. **(Christie Walk)**

(Ecovillage points)

Ecovillages are intended to be socially, economically and ecologically sustainable, intentional communities – and whilst we won't be able to achieve all of that on 5 acres of hillside in suburban Sydney, that's the direction we are heading.

20. (Guru 01) Since 2005 we have been blessed by getting to know eco-village developers and permaculture practioners, many who have visited Illabunda and shared their ideas and experience – ideas such as our garden terraces, amphitheatre, swales, leaky weirs, food forest. We feel very privileged to be part of the eco-village and permaculture communities.

(Guru 02)

So we are aiming to demonstrate a human-scale, full featured settlement which takes large steps toward social, economic and ecological sustainability. An oasis of community in suburban Sydney!

(PN team) The Permaculture Sydney North Garden team at Illabunda in September 2006.

23. (aerial with arrows) The site is not ideal from a permaculture perspective.

Much of it is steep slope facing south-east. The slope areas and the lower parts are subject to landslip and after looking at a lot of options we finally concluded that it was not sustainable to build on that area. So the houses are to be located **(hilltop dwelling zone)** on the top of the hill where the land is relatively flat and stable.

(Forest zone)The lower parts of the site are being regenerated to its native Cumberland Plain Woodland – in time this will become zone 5.

Vegetable gardens and fruit trees will be located around the houses and streets and community areas – which will be zones 1 and 2.

26. (Terraces) Larger plots will be located on terraces on the mid-slope areas (zone 3, 4). Chooks and bees will also be located on the mid-slope areas.

Another constraint on the site is the number of trees. **(trees)** The trees are important to my parents and will make the place lovely in summer, but make a lot of shade in mid-winter, effect the thermal efficiency of the houses and solar access for the gardens.

But being on the top of a hill however has its up side with lovely views from virtually everywhere. **(western sunset)** Winter sunset view to the west. **(sunrise)** Summer sunrise over the city

30. (site plan)

This is the site plan which is in the DA which is currently being assessed by Parramatta City Council. (note that its view is flipped over from earlier aerial views – north on the left hand side)

There are 23 dwellings providing diversity of accommodation for people of all ages. All dwellings are passive solar design and are orientated to give north facing garden/courtyard areas. They are all 8 – 9 star energy efficiency rated and will be made from sustainably sourced, non-toxic materials as far as possible. They will have grid-interactive solar PV and solar hotwater.

(Site plan - duplex and terr)

There are 4 x 4 bedroom duplex houses and 4 X 3-4 bedroom terrace houses along Buckleys Rd.

(site plan – apartments and houses)

On the western side of the site on the top of the hill are 5 x 2 bedroom and 4 x 3 bedroom apartments for people interested in compact single-level living. There are 6 lots where people can build their own individual eco homes.

(Site plan – business centre)

At the front entrance there will be a business centre where people in the village can share office facilities to run their home businesses or we can have a small shop, information centre etc

31. (Buckleys Rd montage) a view in from Buckleys Rd

32. (duplex montage) rough montage of one of the duplex houses looking to the north from the centre of the site

(Site Plan - Village Green)

The village green is social hub of the village. All the houses are spread around it and it will have space for the kids to play, a pool, which will be naturally filtered (**pic of pool**), COB oven for pizzas and a BBQ. It will be a great place to share meals and to catch up.

(Site plan - Community centre)

The community centre is where illabunda and wider community functions will be held.

We intend to include a commercial grade kitchen so we can produce honey, jams etc for sale.

It is on slope and so the undercroft area will have a music room and workshop and tool shed.

(Parramatta view pic) The pic is the winter afternoon view to Parramatta from the deck of the community centre. A nice place to chill out at the end of the day.

Gardens

35. (No dig construction)

All gardens at Illabunda will be either endemic plants or edible/useful plants (food or medicinal properties etc). This pic is of a no-dig garden being made during one of our open days in April last year – beautifully orchestrated by Sue Mossman.

(No-dig) Here it is complete in November last year. It is the size and shape of the north-facing yards of the terrace houses along Buckleys Rd, to show what you can do in that space.

37. (open day line) Pic of the slope areas which will be terraced for vegetable gardens and chooks with a natural amphitheatre at the bottom. Pic taken during an open day last year with visitors on a tour of the site.

(Pa and bees) My father, who is now 85, working on his bees. They will have a spot on the lower part of the site.

Water is an essential part of the Illabunda design. The water system will consist of rain tanks **(diagram)** for all potable uses and treated greywater for all non-potable uses.

In a wet year like we are having at present we should be self sufficient for water, but in dry year the rain tanks will have a minimum amount of water kept in the bottom from a trickle feed from the mains.

40. (grey diagram) Treated greywater will be used for flushing toilets (where composting toilets not used), washing machines and irrigation.

The treatment system will use a vertical reed bed filter **(pic)** and UV disinfection. (a larger version of the one in the picture).

(Grey diagram) It is then reticulated to the houses and around the site

43. (stormwater pic)

A lot of stormwater runs through the site from Buckleys Road (12,500m² 1:1y 150l/s).

(stormwater montage) In at Buckleys Road, through our site an inadequate drain, blockages, flooding. This has caused the council some headaches in the past with flooding issues, but we see the stormwater as a great resource.

45. (System diagram) Our proposed stormwater system includes:

Gross pollutant trap at Buckleys Rd, storage tanks, gully and swale and wetland system and finally a discharge into the council system downstream of the property.

A pipe direct from the GPT sends water to 150,000litre storage tanks – it will be treated through our greywater treatment system for topping up non-potable water supply during dry spells.

(Gully pic) Excess stormwater flows down our gully. This pic of the gully was taken in the middle of last year.

47. (Gully jute and leaky weirs) We cleared the gully of invasive weed trees and are planting it out with Carex and Juncus and Iomandra's. Pic of laying out jute and making leaky weirs, to slow and spread the stormwater. **(pic of planting)** Planting the seedlings 2 weeks ago.

49. (Water thru weir) On of the first weirs we made from sticks and leaves in action after a rainstorm before Christmas.

(swale with water) We built a small swale to divert most of the stormwater around the gully while our seedlings become established and also to get a feel for how the banks and spillways work and how to control erosion and scouring

51. (swale diagram) The main swale will carry excess stormwater across the site and provide some polishing and infiltration and feed the wetland pond. Bushtucker plants and maybe some more fruit and veg along the swale. **(Pennys swale)** It will be about the size of this swale at Penny's place at St Albans.

53. (Pond pic) The swale will empty into a pond is existing but is ephemeral – we will make it permanent for habitat value and as a beautiful and relaxing place in the forest. It will have a poly liner to mitigate landslip risk.

(Melaleuca Grove)

The bottom of the site around the pond, is the forest, which is the wild place which we are regenerating to its natural state of Cumberland Plain Woodland. **(Old olive tree)** There are many African olives which are an invasive weed species and we are gradually removing them but we will keep this one because it was the original tree which is well over 70 years old and is a fabulous climbing tree for the kids.

56. (Bamboo) We also have an old bamboo, planted by my parents (Balcoa?) – we will keep as a resource – may hollow out the centre to make a cubby house or a quite meditation place

(Porous) Stormwater run-off from our site will be minimised through the use of the rain tanks, porous roadways and swales around the site.

Our Development Application is being assessed by Parramatta City Council. Some issue with permissibility of our business centre building which we are working thru with the council at present. – long story. But to get to the design we have just seen we went through a long process of community consultation and development.

58. (open day horse shed)

In mid 2006 we started having open days to give people the opportunity of having a look around the site and hear the story.

The first group of people who came were from the surrounding area and were ready to argue that we shouldn't develop the property because of all the beautiful trees which everyone in the neighbourhood loved.

(Illabunda from next hill) This is what they see of Illabunda from the villas next door!

But when they saw that we weren't planning to make illabunda like the next door villa complex, where everything on the site was removed, **(open day crowd)** but that we intended to keep most of the trees and heaps of green space and to build eco-homes hidden amongst the trees and grow fruit and vegetables - they were pretty happy about the whole thing. In fact both the Masterplan and the DA received no objections from the public – which is a very rare occurrence for a development of this size and proclaimed to be a miracle by our architect!

61. (open day montage 01)

Since then we have been having public open days most months with a variety of themes and presentations including making no-dig vegetable gardens, introduction to permaculture

(open day 02) sustainable transportation, bikes and electric cars, craft activities, seed saving and strawbale housing amongst others.

To date we have had over 1,200 people come through Illabunda at our open days

63. (open day 03)

We discovered straight-away, at the open days, that people were looking for community – a place to belong to above all else. So we started having workshops as a way of bringing people into the Illabunda community.

(workshop) Illabunda then started to evolve from being the Cook family's project and their property, to becoming a place where a new group of people started to feel they belonged and started to look forward to making it their home.

65. (weir day) pic of a community workday late last year when we did a lot of landcare work and built the first of the leaky weirs.

So now we have regular workshops and activities for people who want to go the next step and join the village. This process enabled us to explore what people need and we adapted our plans for Council accordingly.

(community pic)

It's fair to say that nothing that is worthwhile is easy. The cost of this project is substantial to us – financially very risky, totally time consuming and a drain on energy and emotional reserves. The real danger is that it takes a long time and everyone involved becomes fatigued. We need to keep the energy and interest going.

However, something that has been positive for us as a family is that our daughters Alicia and Melinda have also caught on to the vision for Illabunda and have become very much part of the team.

So a lot of what we do there now (**pics of digging swale**) like digging the diversion swale just before Christmas, becomes a family affair. These two pics are of us digging the swale, the hard way.

68. (tractor and swale) In January we got some more tools to make the ground works easier and quicker and a lot more fun – Alicia extending the swale the easy way.

(tractor – log) Melinda and Alicia moving a tree trunk to a storage spot.

With the DA in at council we are now working on the engineering details, approvals for the water and greywater systems etc (**Ma garden**) and construction certificate and hope to have the first people living in the new houses at Illabunda within the next 18 months and the whole project complete within 3 years.

71. (Stu and Graeme)

We believe that we have been given a fantastic opportunity with this property and are committed to making it a place which people really want to belong to, where there are synergies between the people in the community that will demonstrate that you can live in an urban area in harmony with nature and using much less of the worlds limited resources.

72. (End pic – people) some of our group on a candle-lit night bushwalk just before Christmas.
Thankyou