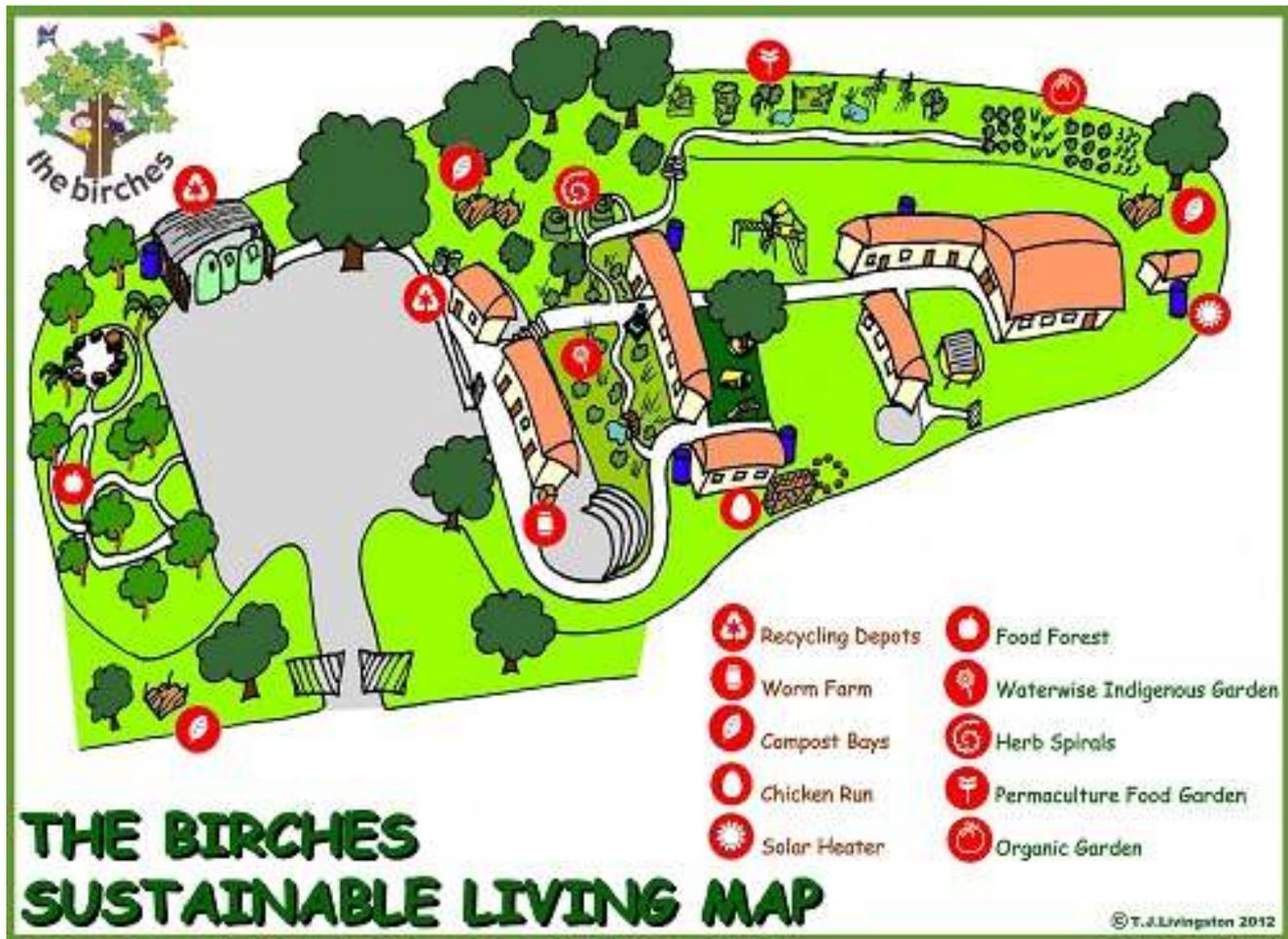


## The Birches



The Birches is a little state-aided Eco pre-primary school in Pinetown. Struggling financially over the years; the school made a determined effort to become environmentally self-sustainable. It has taken 20 years but in an exercise done recently in Grade R; the students are convinced that they could live on the premises as if it were an island and live sustainably there for the rest of their lives!

The school started with an extensive RECYCLING programme; the proceeds of which have funded books and the 'Greening' of the school over the years. There are a number of Recycling stations around the campus –

- At the entrance of the school the children collect a number of articles including computer cartridges, polystyrene trays, toilet rolls, cereal boxes, purity bottles, plastic bottles, bottle tops, bread tags, magazines, newspaper and cans as well as 'kitchen waste' (vegetable peels etc) for the worm farm. Much of this waste is used for craft activities and then recycled formally.

- In the car park there is a formal center where people from the community can drive in and recycle glass, paper and cans.
- Compost heaps are situated around the school to collect *green* or *brown* waste to be used on our gardens. One such heap collects hay from the nesting boxes and manure from our school chickens.

A lovely mural has been created using recycled materials to illustrate the need for 'A Happy Healthy Kwa-Zulu Natal' from the Berg to the Beach!

**WATER** is harvested from four tanks around the school

- the roof over the recycling center harvests water into a tank which feeds our Fruit Forest;
- one near the senior bathroom is connected to toilets which can be flushed with rainwater as well as watering the herb spiral and indigenous gardens nearby
- one tank is used to fill up wash basins outside classrooms and the rest is used for the garden
- another tank is used exclusively where the children plant in pots and look after a mini-plant nursery.
- There is a simple grey water system using the children's hand basin water
- A simple solar water heater made from black pipes and plumbed into a shower is used by support staff in the afternoons.
- A simple Industrial type drain is used to channel storm water underneath the indigenous 'water wise' garden behind the Grade R classrooms.

**FOOD GARDENS**, in areas of the school which cannot be used for play, are used for 'hands on' permaculture ways of growing food. There are a few areas ie

- A **Herb Spiral** near the senior bathroom constructed from round stones into a spiral using the 'Canalianthus' effect. The direction water goes down a plug-hole is mirrored in harvesting rain. The plants using most water are planted at the bottom and the least – on top. These herbs are picked daily to be used in baking muffins etc.
- A **'No-dig' Garden** along the top of a bank which is (ironically) filled with rubble thus eliminating the possibility of digging into the earth. This garden has been established using 'sheet mulching' of green and brown waste collected around the school using a number of different methods including small 'no-dig' beds, a Tower

Garden, Trellis Gardening, Tyre Gardening and a Banana Pit. This garden uses companion planting and a number of little ponds to attract frogs and other predators which will in turn keep insects away from the vegetables.

- A **Fruit Forest** along the road side near the Recycling Station demonstrates natural ways of 'feeding' the soil and at the same time producing long term food production in the form of fruit and herbs. We have a 'long term dream/vision' to construct a stilt wooden structure in which to host talks/teas/visitors to learn about 'living off the grid'.

The children in the school all belong to environmental clubs where they learn about Permaculture, Bio-diversity and other environmental projects. The children take care of the chickens and run a small entrepreneurial business selling eggs, plants, herbs, baked produce, fruit and vegetables from the gardens. They use cut-off plastic bottles to pot plants, make fire-lighters from tea-bags, bouquet garni, soup packs and craft items from recycled materials. This year they won the South Africa Prize in the School Enterprise Challenge. 160 Sustainability Bracelets they sell have just been sold to Carlogie, a school in Scotland!

The school has become a demonstration '*Green Campus*' for visitors. Schools that have requested help in 'Going Green' have brought their learners to The Birches on an outing for a morning's tour and activities. Three pre-primaries saw fit to pay for the outings and the R300 earned each time went into school funds. A list of schools, Eco-clubs and Staff Enrichment groups who have visited can be shared. Three Permaculture Courses per term are currently been run on Saturday mornings for parents, teachers, and community groups. It has also been used for a Diet and Nutrition Group, Municipal Group Training, Youth Groups and as a staff enrichment course for the South African Sugar Research Institute (SASRI) who wanted their staff to see bio-control happening in simple ways they could use at home.

How can children of such a young age make a contribution ... you may ask? The answer is simple. These children are learning about taking care of their environment and their future in a way that few have done. Behind every young child is a whole family; and a community. Their expectation, their questions and their actions ... at such a young age... are influencing many. Adults are more likely to change their actions through the demands of a child. Each and every one of these children is going off to primary schools and into the world making a difference.

***Please give the children at The Birches - the recognition they deserve, and the means - to influence the rest of South Africa too!***

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Please see also

- [www.thebirchespp.co.za](http://www.thebirchespp.co.za)
- [www.sowtolive.com](http://www.sowtolive.com) for information on Permaculture Workshops held at school.
- <http://www.dropbox.com/sh/d3xiwirjlgotukm/qkBn3w12gY?m> for a dropbox 3minute video (Brings the children into the exercise!)

..... And a few photos on the next few pages !



The Mural made of bottle tops and other Recycled materials depicting from the Drakensburg through the valley of a Thousand Hills down the Umgeni River into Durban!

The children working in the waterwise garden in Autumn.



The Fruit Forest showing the Prefab school in the background.



The Recycling station and tank which feeds the Fruit Forest.



The Farm Stall (made from an old Plastic receptacle) where fresh produce is sold.



Courses on Permaculture for adults in the 'No-dig' garden.



Children learning about Permaculture

