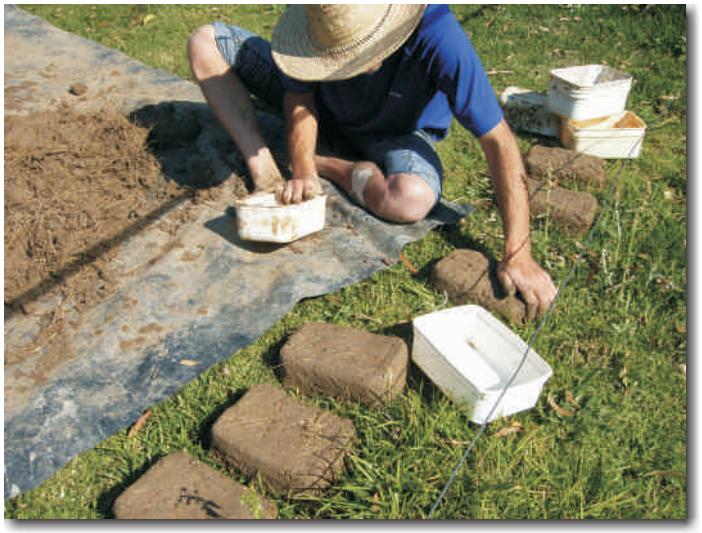
OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Practical Earth Building Workshop

The soil used for the construction of the cob house, came from this excavation pit on the land of 51 Oak Ave. This little dam is now being used for under ground- and rainwater...



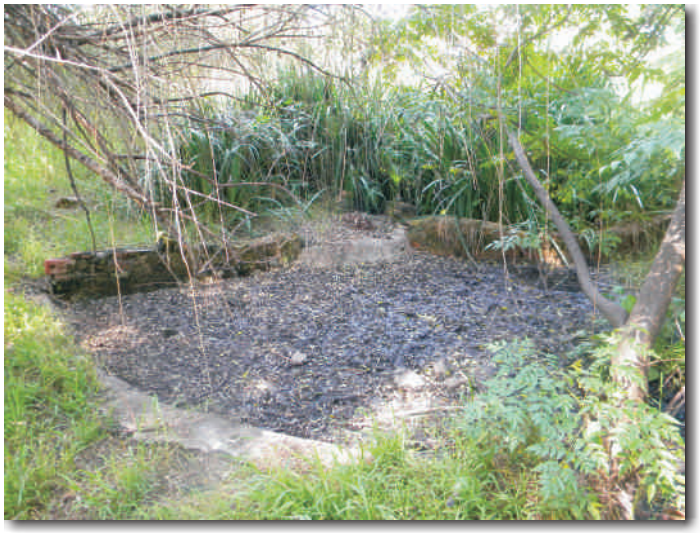
...collection, used for irrigation of indigenous plants, medicinal herbs and shrubs, trees and vegetables. In the near future it will be stocked with Bass fish for angling and consumption.

Hands-on training and lectures were given in three different methods used in earth building.

OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Recycling of Septic Tank Waste Water to feed Bio-Garden



The overflow from the second chamber of the septic tank is channelled through underground ditches with bases of plastic sheeting and rocks, into a specially built round septic-pond with...

...barrier-walls which have been designed to allow water to over-flow from chamber to chamber. The water clarifies as it travels around this circular path and purifies through the roots of reeds...

...and then leaves the pond and once again travels along multiple water channels into the perma= culture-designed bio-garden. There is clean recycled water for the vegetables all year round.

OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Earthworms and Poultry at the Septic Pond

The surface of the septic pond is covered with dead leaves and grass and mulch which converts to compost. Here is where earthworms and insects breed...

...which in turn feed the poultry living in the bamboo forest, this being an ideal natural shelter which dogs don't easily penetrate. 51 Oak Avenue has already become...

...a haven for wildlife: many varieties of birds, a Canadian Geese couple, a family of Mongoose, even snakes ... and at night wild jackals can be heard calling in the distance ... or close by.

OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Bamboo Forest at the Septic Pond

The septic pond water also feeds a bamboo forest to house poultry in a natural habitat with plenty of insects for consumption and an ideal safe shelter from dogs etc. The bamboo, apart from...

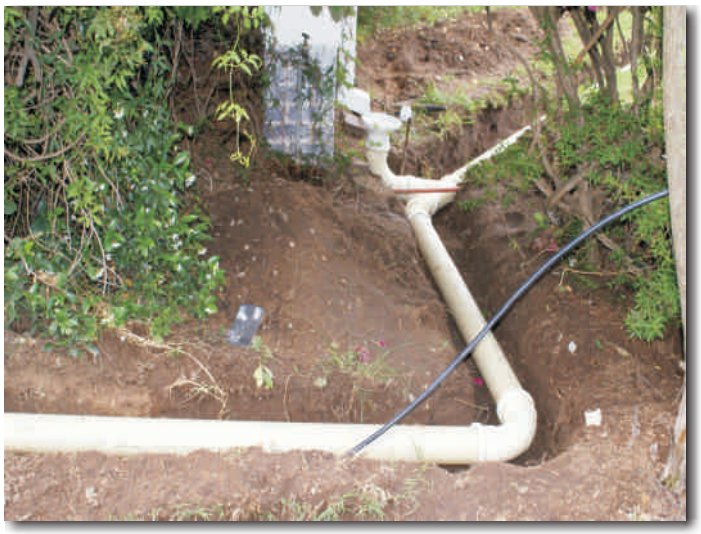
...forming a barrier, also supplies building material. Bamboo can be used for fencing and also serves as support structures for plants such as beans and tomatoes and vine. The bamboo...

...harvested here, is being used for the making of a dome over the Tilapia breeding pond, which - together with solar heating panels - will ensure the survival of the Tilapia during the winter months

OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Rainwater and Greywater Collection



Rainwater from the extensive clay-tile roof is collected through downpipes of the gutters and...

... and fed through a specially designed filtering trough which is also a plant-bed, from where it flows through drainage pipes into the pool to be used for irrigation and fish-farming.

In both these images, grey water is captured from the dwellings' bathrooms and kitchens and channelled through specially built canals, feeding plants with recycled municipal water.

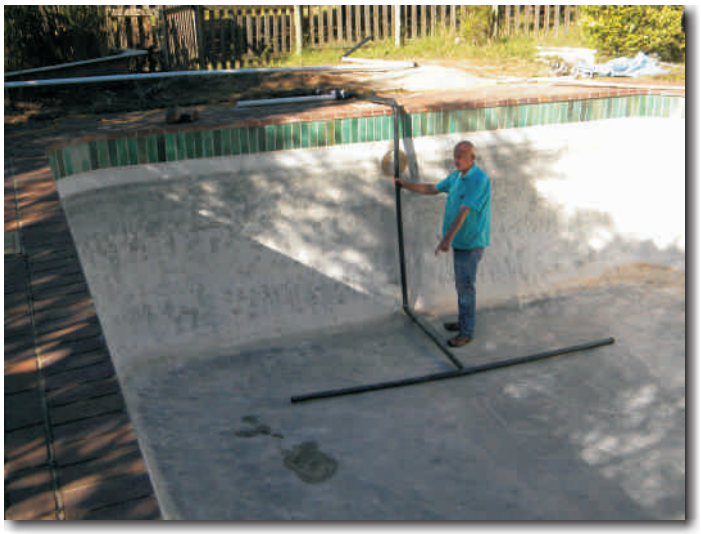
OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Pool to Pond Conversion for Fish Farming

In addtion to 3 porta-pools (home to Koi, Goldfish and Mosquito Fish) the swimming pool has now been emptied in preparation for breeding of Tilapia which will be marketed as “fish-biltong”.

The pool has a capacity of 80,000 litres and can hold up to 20,000 Tilapia. Breeding takes place in summer and harvesting in winter, as Tilapia die at a temperature below 13ºC. At the deep end...



...water will be sucked out through holes at the bottom of the pipe and pumped up to irrigate the Aquaponics eco-planting system, then naturally flow through 3 porta-pools and back into the pool

OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Cultivation of Aquatic Plants and Mushrooms

Aquatic plants for use in ponds and pools and waterfalls, are grown in the excavation pit (the small dam which was created during the building of the cob-house) and also in separate...

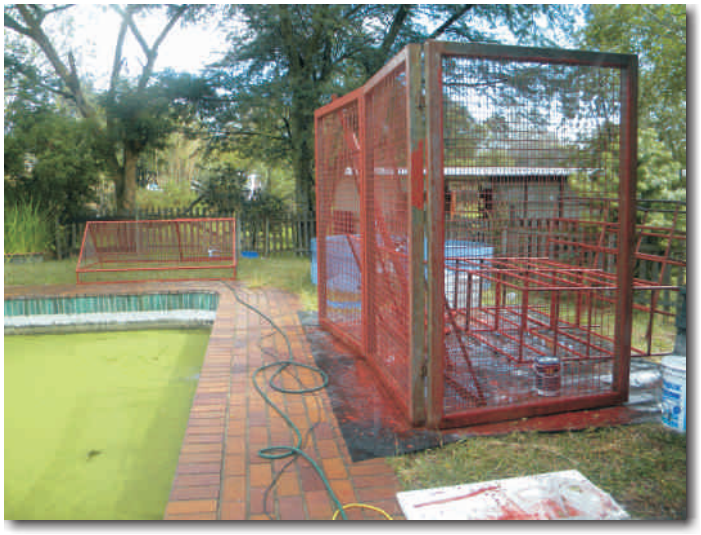
...small containers around the pool area as well as in the ponds themselves.

The earth-building which was a training project and is not safe for occupation, has been partially broken down to be converted into a structure for mushroom cultivation (human consumption).

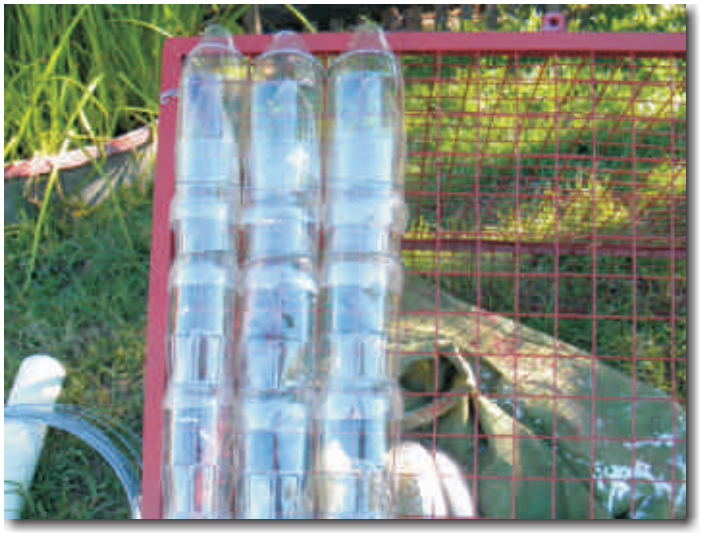
OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

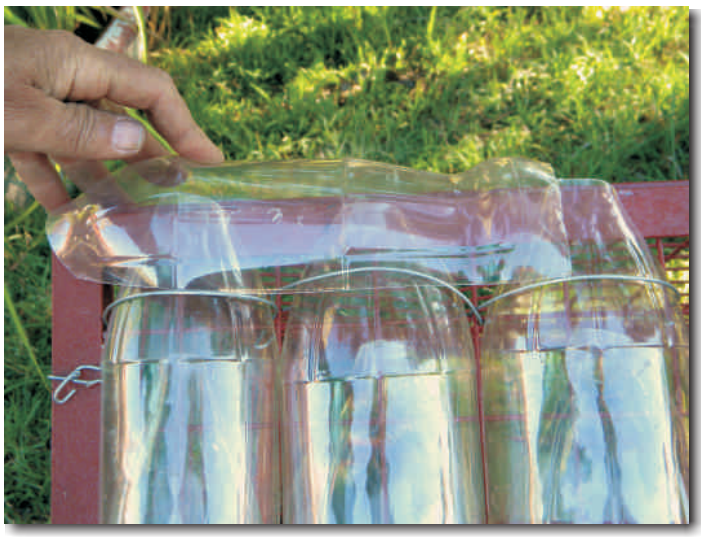
Preparation for Aquaponics in combination with Fish Breeding



An Aquaponics structure is being built from recycled steel, to grow vegetables fed with recycled water pumped up from the pool and dripping down through the several platforms of plants.



Sunlight and warmth is conducted through channels created from recycled cut-up Coca-Cola plastic bottles which also prevent the escape of moisture through condensation. All these eco...



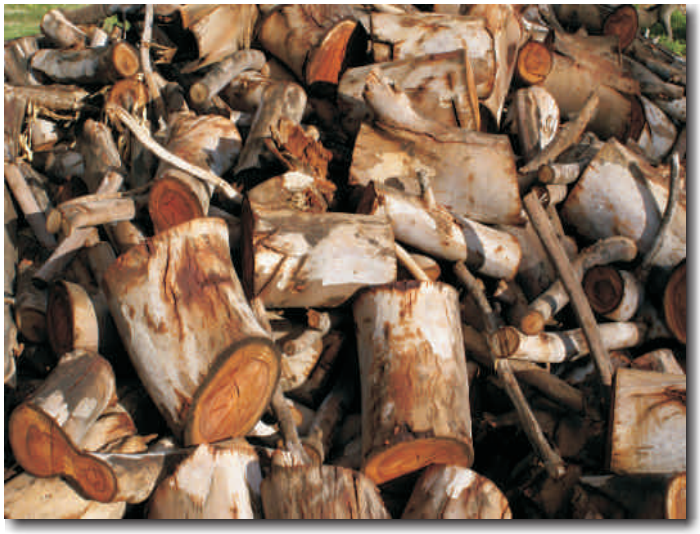
...projects are continually developing until one day the property is self-sustaining as far as food-cultivation, energy- & water supply are concerned. Next: a vehicle running on wood-chips & water

OAK AVENUE TRUST

51 Oak Avenue, P. O. Box 51
Linbro Park A.H. 2065 Johannesburg

Firewood and other Agricultural Activities

Parallel swales have been dug across the width of the land in order to avoid soil erosion and to feed rainwater along trenches into the excavation pit (mini-dam) for water preservation and...



...ground water for trees & shrubs (indigenous*medicinal*food*firewood). Old wooden planks are also collected and used for firewood to save electricity. Firewood is harvested from dead trees.

This is our natural sapling forest. Its wood will eventually be used in the form of wood-chips for alternative energy creation - see experiment of wood-chip-fire for cooking with free energy.