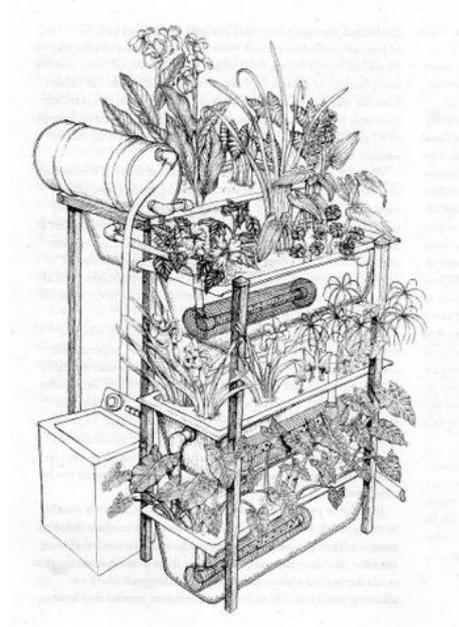


## Constructed Wetland Needs and Yields Analysis

### NEEDS

- Waterproof membrane or container
- Surge tank
- Gravel
- Plumbing
- Water/bog Plants
- Greywater
- Sunlight



### YIELDS

- Thermal mass
- Organic matter
- Amenity
- Habitat
- Biodiversity
- Fresh water
- Humidity
- Greywater treatment
- Shade

Pic taken from the book "Toolbox for Sustainable City Living"

## Banana Circle Needs and Yields Analysis

### NEEDS

- Banana plants
- Companion plants
- Sunlight
- Air
- Water
- Mulch
- Soil biota
- Nutrients
- Protection from pests
- Protection from diseases
- Protection from predators
- Pruning



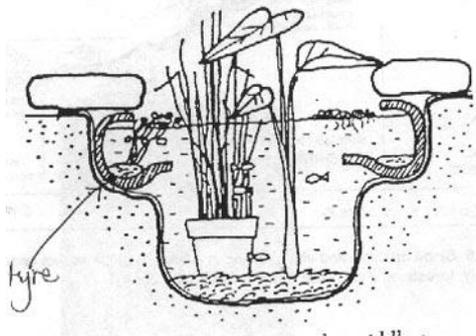
### YIELDS

- Bananas
- Food from companion plants
- Organic matter
- Shade
- Soil stabilisation
- Wildlife habitat
- Dust collection
- Greywater disposal
- Framework (for climbing plants)
- Young banana trees
- Amenity (looks good)
- Banana leaves for cooking

## Water Garden Needs and Yields Analysis

### NEEDS

- Waterproof membrane or container
- Soil / gravel
- Water/bog Plants
- Fresh water
- Fish
- Sunlight
- Aeration
- Fish food
- Protection from pollution/sedimentation
- Insect/bird landing space



### YIELDS

- Edible water plants
- Thermal mass
- Organic matter
- Amenity
- Habitat
- Biodiversity
- Nutrient rich water
- Humidity
- Water for wildlife
- Pest reduction

## Bee Hive Needs and Yields Analysis

### NEEDS

- Bee box
- Frames
- Supers
- Foundation
- Bees
- Water
- Clear runway
- Protection from pests
- Protection from diseases
- Protection from predators
- Nectar producing flowers
- Registration



### YIELDS

- Honey
- Wax
- Pollen
- Propolis
- Pollination
- Fish food
- Entertainment
- Physical exercise
- Stress relief
- Biodiversity
- Employment

## Fruit Tree Needs and Yields Analysis

### NEEDS

- Sunlight
- Air
- Water
- Mulch
- Soil biota
- Nutrients
- Pollinators
- Protection from pests
- Protection from diseases
- Protection from predators
- Pruning
- Thinning
- Cross pollination



### YIELDS

- Fruit
- Timber
- Leaves
- Shade
- Soil stabilisation
- Wildlife habitat
- Wind reduction
- Dust collection
- Soil loosening (from roots)
- Framework (for climbing plants)

## Chook Needs and Yields Analysis

### NEEDS

- Shelter
- Grit
- Food
- Green pick
- Water
- Dust
- Air
- Other chooks
- Freedom from pests



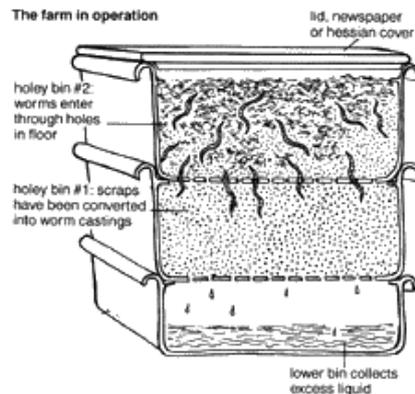
### YIELDS

- Eggs
- Feathers
- Manure
- Methane
- Carbon dioxide
- Companionship
- Cultivation
- Meat

## Worm Farm Needs and Yields Analysis

### NEEDS

- Waterproof container
- Waste organic matter
- Worms
- Hessian
- Cocopeat
- Shade
- Air
- Egg shells/lime
- water



### YIELDS

- Worm castings
- Liquid manure
- Worms
- Organic waste treatment
- Animal food
- Employment
- Aerated compost tea
- Beneficial bacteria
- Interest/satisfaction

## Vegetable Bed Needs and Yields Analysis

### NEEDS

- Mulch
- Organic matter
- Disturbance/cultivation
- Seedlings
- Seeds
- Water
- Sunlight
- Pollinators
- Edging
- Soil biota
- Freedom from pests and disease



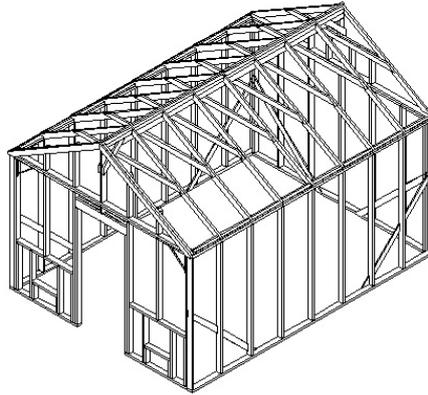
### YIELDS

- Vegetables
- Herbs
- Fruit
- Grain
- Flowers
- Predator habitat
- Biodiversity
- Seeds
- Organic matter
- Amenity
- Interest/satisfaction
- Employment

## Greenhouse Needs and Yields Analysis

### NEEDS

- Transparent covering
- Frame
- Shelves
- Potting mix/soil
- Punnets/trays
- Plants
- Seeds
- Sunlight
- Water
- Shade cloth cover
- Ventilation



### YIELDS

- Seedlings
- Heat
- Humidity
- Wind protection
- Rainwater
- Organic matter
- Out-of-season vegetables
- Storage area
- Work area

## Water Tank Needs and Yields Analysis

### NEEDS

- Catchment area
- Guttering
- Gutter cleaning
- Piping (roof to tank)
- Stable base
- Plumbing (tank to useage)
- Overflow plumbing
- Pump
- First flush system
- Insect screening
- Tank



### YIELDS

- Rainwater for irrigation
- Rainwater for drinking
- Rainwater for firefighting
- Rainwater for toilets
- Overflow water
- Vertical growing surface
- Thermal mass
- Shade
- Separation of areas
- Reduced water bills