CASE STUDY

Sustainable Sussex, Worthing Leisure Centre. Shaftesbury Avenue Worthing BN12 4ET



Overview

Owners: Keith Colin
Type: Community Garden and Greenhouses
Area: 200m2
Residents: Various

Key Features

Aquaponics, with Solar PV
Chilli Farm
Community garden project

Other Features

LED Lighting	
Passive Solar	
Rainwater Harvesting	_

Introduction and approach

Why visit a leisure centre as part of the Eco Homes event? Well, this is home to three great projects that symbolise everything this event stands for. Water conservation in the form of **aquaponics with solar and a chilli farm** which is all part of a growing community garden, educating all who engage with it.

What is Aquaponics? It is a tried and tested way of growing food based on creating a symbiotic, closed loop eco system that recycles waste products from fish tanks into gravel beds in which plants are grown. The bacteria and composting worms in the gravel beds process the fish waste into nitrates on which the plants thrive. The water is then returned to the fish tanks cleaned and oxygenated, thus creating a healthy environment for the fish. It's a pesticide/fertiliser/soil free system. Not to be missed!

The chilli farm housed in the grounds makes good use of spare areas, upcycling, rainwater harvesting and along with the other food varieties that are grown within the greenhouse, enable zero food miles to be achieved.



The **community garden** team comprises volunteers from the local community who have learning difficulties and various social issues plus sessions are run for over 50's and young children, creating the perfect environment for education, inspiration and innovation.

Energy efficiency measures

Aquaponics, with Solar PV

The Aquaponics pilot here at the Leisure Centre is powered by 2 solar panels, each of 245 w which equal just under half a kilowatt of electricity. They are soon to be installed on top of the shed roof as this pilot continues to prove its capabilities.

The advantages of Aquaponics include:

NO DIGGING

NO BENDING

NO WEEDING

HIGH PRODUTION LEVELS

DUAL CROP SYSTEM (PLANTS AND FISH)

5% WATER CONSUMPTION OF TRADITIONAL AGRICULTURE

NON POLLUTING

For more information, why not come along or visit homefarmaquaponics.com

Chilli Farm & Community Garden Project

A community project growing chillies and producing jams, sauces and oils - enabling various needs groups to learn basic growing skills and partake in group activities. The area is opened up several times a week to engage with and educate around reconnecting with oneself and those around us, and with nature, to understand our place within the cycle of life.

The food that is grown is used within the Leisure Centre or locally which ensures very few, if any, food miles.

LED Lighting

There is LED lighting within the onsite shed helping to keep the utility costs and emissions at a bare minimum.

Passive Solar

Within the 2 greenhouses, passive solar is captured and helps with the increasing crop production

Rainwater Harvesting

Water butts and guttering are positioned to work together to ensure every drop of rainwater can be captured, reused and saved from going down the drain. The site may not be large but every element is used to its utmost ability to minimise impacts wherever possible.

Upcycling

Many, if not all the materials on site have been upcycled or recycled from someone or somewhere, showing just what can be used for other purposes when a bit of imagination is used.

Professionals

homefarmaquaponics.com

https://www.facebook.com/SustainableSussex











