



#### **Our Bee Project**

The bee project/ garden within Our Orchard and within other hospital sites is a project that Cardiff and Vale Health board are working on with Cardiff University and New Link Wales Buzzin' Project

The purpose is to establish a Bee Garden in the Orchard at University Hospital Llandough (UHL) and look at alternative sites for bee hives. The landscape, design, and planting of specific flowers will enable local researchers to test for the link with antibacterial strength honey. This project would build on the work of Professor Les Baille and his colleagues from the School of Pharmacy, College of Biomedical and Life Sciences, Cardiff University. They have identified a number of novel plant-derived antibacterial compounds in honey that killed antibiotic resistant hospital super bugs such as MRSA. They have been able to identify the plants whose nectar was the source of these potentially therapeutic compounds.

#### Long Term



This long term project will develop native Welsh wild flowers and bees to enhance the existing patient benefits of the Orchard and other areas of the UHB. The research is now compelling; green spaces have a significant positive effect on physical and mental health. Secondly, it is hoped that this project will contribute to the research knowledge base that may help develop future products that could fight resistant infections and promote the healing of our patients.

# Prevention



The project will enhance the biodiversity of the Orchard and support the pollination of the trees. Bees are an essential aspect of a healthy orchard, ensuring everyone on the UHL site and the local community have access to space that will enhance the benefits of health and wellbeing while supporting our patients on their journey of recovery and rehabilitation. It will allow patients to be taken out of the traditional clinical environment, and enjoy fresh air and natural light which can assist with recovery. The quality of our environment cannot be separated from other aspects of our daily life and is intrinsically linked to our sense of place and sense of wellbeing.

### Integration



This project fits with the Welsh Government Action plan for pollinators. The benefits of supporting our pollinators are numerous - they are an essential part of healthy functioning ecosystems, providing, for example: food production directly as honey, and indirectly as crops; a diverse, functioning and attractive environment; and supporting health and wellbeing, rural economies, and urban green spaces.

# Collaboration



This project will develop collaboration between staff, patients, carers, school children, and academics in health to support our approach to developing sustainable futures. With the largest NHS Research & Development team in Wales, there may also be opportunities for trials of the potential therapeutics across Cardiff and the Vale of Glamorgan.

## Involvement



The public are fascinated by bees, particularly children. The potential for Welsh super-honey and the associated research may also add an extra promotional and educational dimension for both the Cardiff & Vale Charity and Our Orchard. The WellBEEing project has been shaped by the partnership to provide the opportunity for community education, cohesion and sustainability.

Pollinators are an essential component of our environment. Honeybees and wild pollinators including bumblebees, solitary bees, parasitic wasps, hoverflies, butterflies and moths and some beetles are important pollinators in Wales, for crops such as fruit and oil seed rape, clovers and other nitrogen fixing plants that are important to improving the productivity of pasture systems for livestock grazing, and wild flowers.

The value of pollination as a contribution to the UK crop market in 2007 was £430 million and the cost of hand pollination, were we to lose this valuable service, has been estimated at £1.8 billion per year in the UK. The value of honey produced in Wales is also considerable with a wholesale value in excess of £2 million in 2011.

However, bee and pollinator health and declining populations have been increasingly highlighted as a cause for concern in the UK and globally. The main areas of concern for pollinators are land-use intensification, habitat destruction and fragmentation, disease, the use of agro-chemicals, and climate change, although the importance of each of these and the extent to which they are inter-related is less well known.



The health benefits of environmental factors and the impact of nature and wildlife upon physical and mental wellbeing has long been recognised and the WellBEEing project can add value to this vision.

No NHS funding will contribute to the development and maintenance of this project.

Cardiff and Vale

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University Health Board



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