## SCIENCE AND EDUCATION AT THE EDEN PROJECT

Professor Sir Ghillean Prance FRS, VMH Scientific Director, The Eden Project

The Eden Project is one of the most successful of all the Millennium projects in the UK and is known as a popular tourist destination that has done much to improve the Cornish economy. However, its main purpose is to promote public education and research in flora, fauna and other aspects of the natural world and to encourage sustainable use of natural resources.

The Eden Project is owned by the Eden Trust which is a company limited by guarantee and a UK registered charity. It depends largely upon visitor income to support its work and since opening in March 2001 it has received over 11 million visitors. Eden seeks to communicate its message in many different exciting and positive ways which vary from story telling and lectures to theatre, music and art. It is all about challenging our visitors to be concerned about such issues as species loss, climate change, food security, increasing energy costs and environmental services. Eden explores the need for adaptation to meet the challenges of the 21st century and it communicates stories on how people and organisations are working towards positive initiatives in these fields in order for humankind to survive and thrive. Above all we seek to present up-to-date accurate scientifically-based facts in ways that will get our message over.

The Eden Project is a splendid resource for education at all levels. The young people's education programme at Eden is innovative and exciting thanks to the creative approach of the education staff. Every day groups of young people are to be seen busy with learning projects. For example, someone dressed as a chef may address a school group and explain that he is lacking the ingredients of a cake he planned to bake. The children are sent off to find them throughout the Biomes and come back reporting where to find the plants that yield sugar, chocolate, flour, raisins, cinnamon, and other ingredients. When they return the chef bakes the cake and they go home remembering that plants produce most of the ingredients. They may explore the Rainforest Biome in the programme "Don't forget your Leech Socks" where they search for survival foods and shelter from the plants. Education at Eden includes programmes on such topics as climate change, food, nutrition, health, biodiversity and the sustainable use of biological resources.

Around 50 thousand students visit the Eden Project in organised educational groups every year so it reaches a large audience.

To communicate the message of Eden is the main purpose of the

project and for this, three areas of education are most important; the guides or 'Pollinators', exhibits and interpretative signage. On busy days the story telling Pollinators are placed at strategic points across Eden's global garden. They are versatile and may act as performers, guides or storytellers. They are delivering economic botany classes and stories concerning sustainable development to the public on a daily basis. The project also has much interpretative signage and many exhibits that seek to tell the stories of plants simply, but interestingly.

Eden offers a two-year diploma in horticulture in collaboration with Duchy College. It is hoped to upgrade this course soon to the level of a foundation degree. The popularity and need for this diploma is evidenced by the large number of applicants received for the ten available places. This year a Master's degree in horticulture will be started with the University of Plymouth.

Already a number of students have completed their PhD or Master's degree research at Eden or at Eden sponsored sites around the world. We were able to obtain a grant from a UK foundation to sponsor postgraduate students. Their work ranges from studies of soil and pest build up in the Biomes to work with rare and endangered plants in such

places as The Gambia, St Helena, the Seychelles and the Atlantic rainforest of Misiones, Argentina. Eden is working closely with the Universities of Exeter, Plymouth and Reading and a number of other universities worldwide.

Conservation work in the Seychelles led to the creation of a new ornamental hybrid Impatiens called 'Ray of Hope." This was a cross between a critically endangered Seychelles endemic, Impatiens gordonii, and a common domestic impatiens species. The sale of this new variety through the Eden shop is both raising awareness about the conservation of rare species and is raising funds to support conservation work in the Seychelles.

The Eden Foundation has formed partnerships to work in collaboration with a large number of organisations at home and abroad. These vary from conservation organisations such as 'Plantlife' to the Iwokrama Project in Guyana, which is working on the sustainable use of rainforest. Some of the other organisations Eden works with are the Earth University in Costa Rica, the Yaboti Biosphere Reserve in Argentina, the Forest Restoration Research Unit (FORRU) in Asia, and the Ballabu Conservation Project in The Gambia. Closer to home Eden is collaborating with the UK Homes and Communities Agency in their 'Places of Change' programme.





Impatiens 'Ray of Hope.'

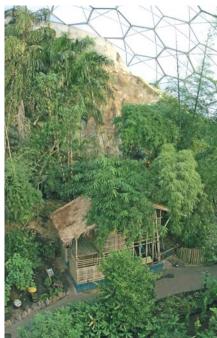
This focuses on homeless people and prisoners and the causes for their exclusion from society. In 2009 this was brought to the attention of the public through exhibiting a garden at the Chelsea Flower Show. All the plants for this exhibit were grown by homeless people and prisoners. Eden has a programme working with Dartmoor Prison to teach prisoners to grow vegetables. We are finding that growing food in prisons has caused marked benefits to the health, behaviour and outlook of prisoners. Each of these collaborative projects brings a new dimension to the Eden Project. The organisations, projects and programmes benefit from the publicity that Eden can generate for them, and Eden learns more about the messages that it can bring to the public. This open sharing and co-operation is one of the aspects of Eden that I find most attractive.

Another outreach programme of Eden is 'Gardens for Life' which connects children around the world through their shared experience of school gardening. Over 300 schools are currently involved. This programme supports children, young people, teachers, project leaders, families and communities worldwide to garden and grow crops. It is now functioning in localities in the UK, Singapore, The Gambia, Kenya and India. The aim is to create a global community that is equipped to face the challenges of the 21st

century, such as food security and health, climate change and water, indigenous knowledge, cooking, medicine and youth empowerment.

Eden offers a ray of hope for the future at a time of environmental and financial crisis. It has rapidly become a force for plant science, education, conservation and sustainability. To quote its Chief Executive and Co-founder, Tim Smit, "Eden is about optimism and the possibility of change."

To learn more about the **Eden Project visit:** www.edenproject.com



Eden's Rainforest



Indian school taking part in Gardens for Life



Storytelling