# THE ENVIRONMENTAL EDUCATION PROGRAMME OF THE JARDIN BOTANICO CANARIO "VIERA Y CLAVIJO"

## Introduction

The Jardín Botánico Canario "Viera y Clavijo" was founded about 40 years ago as a conservation garden dedicated to the cultivation, study and protection of the local Canarian endemic flora. In the original project for the garden the subject of environmental education was one of the principal themes and although it took a number of years for the garden to become actively involved with this subject, it has now become one of our most important activities.

The garden really became involved in education in the late 1970s when the liberalization of the Spanish education system followed the transition from the old Franco regime to democratic government and decentralization allowed the development of local and regional education programmes.

# Schools education

Our first steps into this field came in answer to the demand from local teachers for information and materials on our local flora and fauna. We started by organizing courses for in-service teachers on these subjects using the garden as a base and as a centre for the practical activities carried out on the courses. These courses were very successful and, in response to the demand, were repeated several times in the first few years.

One of the main results was a large increase in the number of schools and children wanting to visit the garden, so the next stage in the development of our programme was to move one member of staff to the co-ordination of school visits and to act, initially, as a guide.

About the same time, we also set up a small nursery for two purposes, first as an extension exercise to enable us to provide local Canarian plants for school gardens and thus enable teachers who participated in our courses to carry on locally with some of the projects in their own school gardens and, secondly, as a means of teaching children to look after plants directly by planting seeds, potting on, watering, weeding etc. This helped to teach about the requirements of the different types of local plants and habitats, dry-zone succulents, laurel forest species, coastal plants etc. Children are also given access to laboratories where advanced research goes on but where it is emphasized that very basic knowledge is needed before advanced research can be carried out. The large number of school visits eventually led us to request help from the local education authorities who eventually placed two permanent teachers at our disposal in the garden. This left us with the possibility of using our own staff to promote the extension service side of our education programme and to broaden the spectrum of our activities.

## **Outreach education**

Now we consider taking environmental education into the classroom as much a part of our role as bringing children to visit the garden. We have, therefore, developed a series of travelling exhibitions which are taken regularly to schools all over the island. We have also prepared a number of slide packs with appropriate texts for various levels on several aspects of flora, fauna and general conservation issues etc so that teachers can use them as the basis for their own courses on such subjects. These slide packs are given to schools in exchange for blank film which can then be used to reproduce a new set of slides for another school.

The original project was funded as part of a WWF grant given to the garden for a programme known as "Plantas y Futuro" which covered a wide spectrum of conservation activities from research and rescue of critically endangered species to environmental education and specialist training. Within this project we were able to produce a series of posters on the Canarian flora and fauna which are distributed free to schools, local ecology groups etc. Within the WWF project we also produced a series of leaflets, worksheets, colouring books and other practical materials to be used during visits to the garden and later in the classroom. These materials form the basis of our philosophy of taking environmental issues into the school and into the classroom as part of the normal education system and of not allowing a visit to the garden to be simply a one-off event but to be part of a continuing education process. Two of the posters are associated with our children's Tree Planters Club which encourages children to look after and plant trees in their local school and home environments. The posters have proven to be particularly useful as, if they are attractive enough, they appeal to adults as well as to children and we see them in local shops, hotels and

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even bars and this helps to spread the conservation message wider than just the school population.

#### Adult education

Getting a conservation message through to the adult population is also an important part of conservation education but requires a different approach. Most of our effort in this field goes into either exhibitions at local fiestas, flower shows, trade fairs etc which have a large public audience or by using the garden itself as a shop window for conservation by means of exhibitions and activities in the garden which vary from lectures and seminars on subjects such as culture and environment to concerts in the garden etc. Adult environmental education is an area we are seriously exploring for the future with the development of a new education resource centre in the garden which will serve both adult visitors and children. This will have a large exhibition room and several smaller ones, a classroom/laboratory, audio-visual facilities, an outside patio which can serve as a classroom or a stage for other activities. We are considering building a small open-air amphitheatre in a new area of the garden which is currently under development.

# **Teacher training**

New developments in the education field over the past year or so have included the setting up with the Teacher Training Department of the University of Las Palmas de Gran Canaria of a programme which enables a limited number (5 in 1990, 8 in 1991) of trainee teachers to do part of the classroom contact period of their course in the garden working with visiting school children. The garden offers them an initial course of 15 days on environment, flora and fauna, one month of practical work with visiting children, 2 weeks working on design of education materials, routes for visits etc, using their previous experience of school visits to the garden, and 2 weeks when, with the aid of staff from the garden and the University, they evaluate the results of their experiences. Another recent development has been to extend our in-service teacher courses to include other environmentally orientated centres on the island of Gran Canaria, such as the Fisheries Technology Centre, the Cabildo Insular estate and traditional farm at Osorio, the Bird Rescue Centre belonging to the Canarian Government's Environment Department etc. In co-operation with these centres we are able to offer a much wider spectrum of education on environmental issues, including such important ones as coastal pollution etc.

## Networking

One of the most useful developments in recent years has been provided by the co-operation network now existing on an international scale between botanic gardens and learning what other people are doing and how they are going about it. The education network set up by Botanic Gardens Conservation International (BGCI) has been particularly helpful in this sense and the garden's education staff have been very pleased with the education packs, ideas, posters etc received from BGCI. We have been able to use many of these to show local people that conservation and environmental education is not just a local issue but one which demands attention on a world scale and that our own programme is part of the world network.

## Conclusion

H G Wells said that "Human history becomes more and more a race between education and catastrophe" - nowhere is this more true than in the environmental crisis we are currently facing and here botanic gardens, the unique interface between people and plants, can be one of the most important vehicles we have for getting the plant conservation message through to the general public and their representatives.

Jardín Botánico Canario "Viera y Clavijo", Apartado de Correos 14, Tafira Alta, Las Palmas, Gran Canaria, Islas Canarias, Spain